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Teacher Educators: Identities, Roles, and Influences on Teacher Education Reform

Alberta Journal of Educational Research

Theme Issue (Summer 2000)

Guest Editor: Ardra L. Cole

Faculties of education across Canada, throughout North America, and beyond are once again in the throes of teacher education reform. The complexity of this process is exacerbated by the range and diversity of individuals and institutions directly and indirectly involved in teacher education and by the ill-defined nature of the field of teacher education in general. Faculties of education employ full-time faculty as teacher educators; employ second educators from school boards as adjunct or clinical professors; hire people on contractually limited appointments to serve in a variety of roles; and utilize the services of school-based educators who serve as associate or cooperating teachers for preservice teacher candidates.

- What are the implications of this broad-based involvement for teacher education programs and their reform and for teacher education as a field?
- What are the influences of the multiple and diverse roles, identities, and commitments of those involved in teacher education on teacher education programs and their reform?

The questions noted above will be the focus of the theme issue. Articles will cohere around broad themes related to improving teacher education and addressing the challenges associated with the multiple and diverse identities of teacher educators.

Authors planning to submit a manuscript are encouraged to submit a brief intention statement or abstract (250 words) well in advance of the deadline in order to receive feedback about the appropriateness of the submission for the theme issue. Abstracts, intention statements, or preliminary inquiries should be sent to Ardra Cole by electronic mail at ardracole@oise.utoronto.ca or by facsimile at (416) 926-4749. The deadline for preliminary submissions is **January 30, 1999**. The usual **ajer** manuscript guidelines for authors apply. Please refer to guidelines as described in our current volume and submit manuscripts by May 31, 1999 to:

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Format	Submit the manuscript in triplicate. Manuscripts are not to exceed 6,500 words excluding graphics. Use standard type and double-space throughout, including block quotations, references, and notes. To ensure anonymity in the review process, the author's name and affiliation appear only on the title page; the title alone heads the first page of the manuscript. Provide an abstract of approximately 100 words on a separate sheet.
Style	ajer's editorial style conforms closely to the <i>Publication Manual of the American Psychological Association</i> (4th ed.). Editorial changes may be made to manuscripts. For spelling, consult <i>Webster's New Collegiate Dictionary</i>; spelling in quoted material remains as in the original.
Referencing	Sources cited appear in parentheses after each reference (direct or otherwise), giving author's name (unless mentioned in text), year of publication, and page number(s) in the case of direct quotes. Enclose quotes of 40 or fewer words in double quotation marks in the text; indent quotes longer than 40 words in block format. Page numbers must be given. List all sources alphabetically at the end of the manuscript under the heading <i>References</i> using the APA style. Footnotes are not allowed, and the use of endnotes is discouraged; however, <i>necessary</i> brief explanatory notes, numbered consecutively and marked in the text with superscript numerals, may appear before the References under the heading <i>Notes</i>; citations in notes follow the same format as other references.
Graphics	Number tables and figures with Arabic numerals and provide each on a separate page at the end of the manuscript. Prepare tables using tabs and without vertical lines; provide figures, charts, and diagrams in camera-ready form. Indicate placement of figures and tables in text, i.e., <i>Insert Table 3 here</i>.
Diskettes	If the manuscript is accepted for publication, please supply in electronic form on a diskette. WordPerfect for PC and Microsoft Word for Macintosh are the preferred software. Mark diskette with originator's name, program used, and program version number.
Research Notes	Research Notes are brief notes on research-in-progress or recently completed research, 1,000 words excluding graphics and references. Provide e-mail address, fax, and/or telephone number. Detailed guidelines are given at the beginning of the <i>Notes</i> section.

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Editorial: Moving On, Carrying On

Those of you who read "A Note from the Editor" in our Spring 1998 issue will be surprised by the appearance of separate Summer and Fall issues this year. For various and happy reasons, we have been able to return to the publication of four separate issues in 1998 rather than publishing a combined Summer/Fall issue as planned and announced. Thus you are now reading the third of four issues in Volume 44. This issue will be followed in due course by the Winter 1998 issue, which will be edited by my successor Julia Ellis.

I am pleased to announce Julia's appointment as editor of *ajer*, effective July 1998. Dr. Ellis is an associate professor in the Department of Elementary Education at the University of Alberta. She has previously held appointments at the University of Toronto, OISE, the University of Lethbridge, and the University of British Columbia. Her earlier work was in educational psychology, but in recent years she has turned her attention to the areas of curriculum studies and qualitative research. Julia has been an active participant in Canadian and international educational research circles and will be known to many of you. Welcome, Julia!

As I move on from editing the work of others to a renewed focus on my own research and writing, I can't resist offering one or two reflections on the world of scholarly publishing as I see it after three years in the role of *ajer* editor. In the past three years, I have read well over 200 full-length manuscripts, worked with at least that many manuscript reviewers, and solicited a variety of research notes and book reviews. The majority of the authors have been Canadian, spanning all 10 provinces and about 50 institutions, with about 10% of authors from the United States and other countries. The good manuscripts have been very good, and it has been a pleasure to work with those authors—both experienced and new scholars—who have submitted well-written, substantial manuscripts.

But a surprising number of the submissions—also from both experienced and new scholars—have been less than good. Some would-be contributors fail to demonstrate that they can write (clearly) and/or that they have anything much to write about. The latter is often linked to a failure to demonstrate that they can read—to read, that is, the extant scholarly literature (sometimes published in *ajer*!) on the topic they themselves are writing about. Some aspiring authors apparently can't even read *ajer*'s manuscript guidelines. Too many studies are ill thought out, badly designed, perhaps too hastily conceived and executed. As a qualitative researcher myself, I have been saddened to see reports of so many small, superficial, "exploratory" studies on topics that have already been much explored, the territory by now well mapped. I have rejected without external review many manuscripts bearing the characteristics outlined above, particularly when those submissions come from established academics who should know better than to submit work of that quality to a journal of *ajer*'s international stature. I have been unwilling to impose on other colleagues the obligation to spend their own, all-too-scarce time reviewing such manuscripts.

It is an old lament, but depressingly true, I have found. In the press to publish or perish (if indeed that would be the result—we all know of many instances where it has not been), some academics and aspiring academics are much more interested in pumping out articles than in making a scholarly contribution; much more willing to “talk” about their work than to read anyone else’s, however much it might inform their own; much keener to be published in a widely indexed and circulated journal like **ajer** than to support the journal by subscribing to it themselves or even doing an occasional manuscript review.

Fortunately for all of us, such individuals are not in the majority: there are many good citizens in our academic community. When I have sent obviously inadequate but promising manuscripts to reviewers, I have been equally surprised by the dedication most of those reviewers have shown in providing the author(s) with constructive, detailed suggestions for improvement. I am particularly grateful to **ajer**’s associate editor and consulting editors for their many contributions in this regard, and especially their responsiveness when I identify a would-be contributor as a new scholar. Through our concerted (editor—reviewers—author) efforts, many unpublishable manuscripts have eventually reached publication as legitimate contributions to scholarship in education. Seeing that happen is, of course, one of my greatest satisfactions as an editor.

Among the other pleasures of this job have been my acquaintance—often only by e-mail—with a growing network of colleagues in a wide range of specializations related to education. I have been very impressed, as I have mentioned, with the professionalism shown by some would-be contributors, by **ajer**’s editorial team, and by a very large proportion of those other individuals whom I have involved as reviewers. Peer review at its best is a genuine form of scholarly community, and I believe that, at its best, it has served **ajer**’s several hundred subscribers in more than 25 countries well.

Combining eclecticism with quality while working to extend **ajer**’s reach has always been our challenge. I believe that we at **ajer** do rise to meet that challenge. Thank you to all of you—consulting editors, associate editor, members of **ajer**’s operating team (all on our masthead), as well as reviewers, loyal subscribers, and funders—who make **ajer**’s contributions to scholarship in education possible. **ajer** carries on.

Beth Young
(Retiring!) Editor

Peter P. Grimmiett
Simon Fraser University

Reconceptualizing the Practice of Teacher Preparation: On Not Throwing Out the Concurrent Model with the Reform Bathwater

In this article I call for a reconceptualization of practice in Canadian teacher preparation programs around the concurrent model. My criticism is not against consecutive programs per se, but against the American-influenced reform thinking that uncritically presumes the dominance of the consecutive model. I argue that teacher preparation must be located in collaborative partnerships between faculties of education and the field on the one hand, and between faculties of education and university faculties of arts and science on the other, and that such an arrangement calls for a reconceptualization of teacher preparation. I further argue that, provided faculties of education grasp the opportunity and reconceptualize both their mission and preparation programs in this way, Canadian teacher educators could lead the way in efforts to revitalize teacher preparation around the world. My purpose is twofold: to show how a reconceptualization of teacher preparation will involve partnerships around interdisciplinary study and teacher research in a reconceptualized concurrent preparation program bringing together discipline-based and practical knowledge, involving (a) the engagement of preservice teachers in action research into dilemmas of teaching, and (b) the rigorous integration of liberal arts and sciences with professional pedagogy.

Dans cet article, l'auteur affirme d'une part, qu'il est nécessaire de repenser la pratique dans les programmes de formation des enseignants au Canada et, d'autre part, que cette reconceptualisation doit se faire selon le modèle concurrent. Sa critique ne concerne pas tant les programmes consécutifs comme tels que le courant réformiste influencé par les États-Unis et qui accepte sans critique la dominance du modèle consécutif. L'auteur précise que la formation des enseignants doit se faire par le biais de partenariats entre les facultés d'éducation et les responsables des postes en salle de classe d'une part, et entre les facultés d'éducation et les facultés universitaires d'arts et de sciences d'autre part. Une telle entente implique une reconceptualisation de l'orientation des enseignants. L'auteur poursuit en maintenant que si les facultés d'éducation saisissent l'occasion et reconceptualisent ainsi leur mission et leurs programmes d'orientation, les formateurs d'enseignants au Canada seront en mesure de diriger les efforts qui visent à revitaliser la formation des enseignants de par le monde. L'article a un double objet: d'établir comment une reconceptualisation de la formation des enseignants impliquera des partenariats pluridisciplinaires et de la recherche par les enseignants sur un nouveau programme de préparation concurrent qui lierait les connaissances particulières des divers domaines aux connaissances pratiques. Ce programme reposerait sur l'engagement des enseignants en formation dans la recherche active sur les dilemmes en enseignement, et sur l'intégration rigoureuse des arts libéraux et des sciences à la pédagogie professionnelle.

Peter Grimmiett is a professor in the Faculty of Education and co-director of the Institute for Studies in Teacher Education. His research interests focus at the preservice and inservice levels on the relationship between teachers' development of their craft and the processes of reflection, collegial consultation, and classroom-based action research. Recently he was a keynote speaker at international conferences on teacher education in Kansas City, USA; Lahti, Finland; Tel Aviv, Israel; and Ottawa, Canada.

Much of the reform rhetoric aimed at restructuring teacher preparation has tended to emphasize consecutive programs at the expense of the concurrent model. At the same time, this rhetoric has pressed teacher educators and policy-makers to introduce alternative approaches (e.g., collaborative and/or school-based programs, professional development schools, different grouping structures for practicum or field experience, etc.) into teacher preparation as a way of revitalizing its practice. To do so, however, without first addressing the larger philosophical issues embedded in efforts to restructure is to avoid the serious challenges currently facing higher education-based teacher preparation.

Tolstoy's story "The Three Questions" (Dunnigan, 1962) helps me to illuminate those challenges. The story goes like this. A king wanted three questions answered: What are the most important things to do in life? When is the right time to undertake them? and Who are the right (and wrong) people to deal with in so doing? But no one could address these questions to the king's satisfaction. So he disguised himself as a peasant and went into the woods to visit a wise old hermit whom he found digging a garden. Noticing the man's frailty, the king took over the digging and dug for hours, while the hermit said nothing. Then the king tended the wound of a suddenly appearing injured man. The king later learned that this stranger had tried to kill him but had been wounded by the king's soldiers. The king and the man became reconciled. Before leaving the king again asked the hermit his three questions. The hermit told him he had already been answered and explained:

Had you not taken pity on my weakness yesterday and dug these beds for me, instead of turning back alone, that fellow would have assaulted you, and you would have regretted not staying with me. Therefore, the most important time was when you were digging the beds; I was the most important man; and the most important pursuit was to do good to me. And later when the man came running to us, the most important time was when you were taking care of him, for if you had not bound up his wound, he would have died without having made peace with you; therefore he was the most important man, and what you did for him was the most important deed. Remember then: there is only one important time—*Now*. And it is important because it is the only time we have dominion over ourselves; and the most important man is *he with whom you are*, for no one can know whether or not he will ever have dealings with any other man; and the most important pursuit is *to do good to him*, since it is for that purpose alone that man was sent into this life. (p. 88)

My article is essentially a statement addressing Tolstoy's three questions in the context of the practice of teaching and teacher preparation. Having addressed the questions, I then attempt to show one way teacher preparation can be reconceptualized to generate hope in its mission.

What Are the Most Important Things to Do?

Teaching is an occupation that requires careful attention to details; its practice is also accompanied by endemic uncertainty and doubt. One important thing to do, then, is to prepare teachers with a sense of hope that infuses their everyday treatment of students. Put differently, they would be encouraged to "live a teacher's life" (Sumara, 1996), not simply adding the practice of teaching to one's life, but beginning to live a life that includes teaching. Such a life is always

lived in relation to others, the world, and oneself. It is both an intellectual and a moral endeavor calling one to deal courageously with the dilemmas that accompany serious attempts to teach. One such dilemma is that it takes time and experience to realize that growth in students emerges unevenly, unpredictably, often haltingly (Hansen, 1995). Thus it is important to prepare teachers who can both commit themselves wholeheartedly to the immediate curriculum, pedagogical, and student-oriented concerns of a teaching-learning situation and be capable of reflecting in a manner that frees them from being captive to that pressing immediacy of teaching.

Another important aim of teacher preparation is to enculturate student teachers into the practice (as distinct from the profession) of teaching. Many of the current efforts (Holmes Group, 1986, and others) to improve teaching can be characterized as attempts to professionalize the occupation. They tend to socialize prospective teachers into the work force of the profession rather than facilitate their enculturation into the practice of teaching. This distinction is important because “professionals can discharge their duties without entertaining the possibility that their work might form part of their identity as persons” (Hansen, 1995, p. 146). I am not here suggesting that the profession is unimportant; rather, I am arguing for the prioritization of practice over profession when it comes to the preparation of teachers. Why? Because when teachers view themselves as members of a practice, they tap into a set of historically derived customs, norms, and principles that can guide them through difficult moments and help them understand that their actions need not be determined by their current situation.

Herein lies a delicate irony: the source of a teacher’s professional identity must be the practice, not the occupation, of teaching. Hence I strongly suggest that an important thing to do in teacher preparation is to enculturate persons into the practice of teaching, as distinct from the current emphasis on socialization to the working profession.

When is the Right Time to Undertake Them?

I argue that there is no time like right now—in what Wideen (1995) describes as the current difficult, changing, and sometimes adverse conditions of teacher preparation—to do the important things of preparing student teachers with a sense of hope founded on living a teaching life and enculturating them into the practice of teaching. In other words, teacher educators must help prospective teachers to regard what they do as an attempt to engender possibilities in the world rather than as a reaction to circumstances frequently beyond their control. Teacher educators need to take hold of a similar conviction, one that enables them to work purposefully, patiently, and persistently with young people who will touch the future of society—that is, teach!

Who Are the Right (and Wrong) People to Deal With in so Doing?

The right people are teacher educators writ large; that is, university colleagues in the faculties of education, arts, and science, and colleagues in schools, those persons who indwell and shape the practice of teaching at whatever level, who believe “teaching to be potentially meaningful, as the way to instantiate one’s desire to contribute to and engage with the world” (Hansen, 1995, p. 10). The wrong people are those who are unconcerned about their everyday treatment

of education students, those who conduct themselves in an execrably predictable and perfunctory manner, thereby avoiding the teacher's ultimate responsibility to benefit students (Jackson, 1968).

A Defining Moment for Teacher Preparation In Canada?

Many countries are currently seeking ways to restructure teacher preparation. England and Wales have led the way but others are not far behind. Imig (1995) recently suggested that the Republican Contract with America essentially aims at the reengineering of higher education. He saw certain events as foreshadowing tremendous problems in teacher preparation. For example, the State of Colorado has legislation in place mandating members of a faculty of education to undertake at least 15 hours per week in school classrooms. A further example lay in the move to place teacher licensure in the hands of local schools so that they can hire whomever they please, regardless of background and qualification. There is also conservative sponsorship of anticredential, alternative certification models for entry into teaching, strong support for school-based professional development programs, and concerted efforts to uncouple teacher salary advancement from the accumulation of university credits. These all constitute persistent threats to teacher preparation and reinforce an emerging view around the world that the future of higher education-based teacher preparation hangs in the balance. Thus teacher preparation currently appears to be more in a state of turmoil—indeed, in some countries under attack—than in a state of continuous improvement.

These developments are present in North America only in the United States; in Canada the state of affairs is different. As in the US, Canadian teacher preparation programs are disconnected from school reform efforts, but unlike US programs they are contained in a relatively limited number of institutions. This containment has proved advantageous in bringing about growing pressure points of restructuring that suggest some potential for future reconceptualization. Sheehan and Fullan (1995) report on how in British Columbia the creation of the College of Teachers and university colleges, together with provincewide curriculum reform, has acted as a catalyst for change and spawned numerous collaborative projects. In Ontario they note how the lengthening of teacher preparation, the creation of the Ontario College of Teachers, and the building of preservice-inservice links represent important steps forward. Moreover, the Learning Consortium at the Faculty of Education at the University of Toronto (FEUT) has many structural features (e.g., student cohorts, faculty team-teaching, clustered partner schools, a focus on educational reform, embedded inquiry, 150 of 300 days in focused field placements and internships) that Tom (1995) argues are vital for revamping teacher preparation. Sheehan and Fullan's (1995) focus was restricted to British Columbia and Ontario. Other provinces have also engaged in restructuring efforts designed to improve teacher preparation. In Alberta teacher educators in the preparation programs at the University of Calgary and Concordia University College have undertaken a reexamination of their purposes and practices in educating teachers. Similar attempts have also taken place in Saskatchewan at the Universities of Regina and Saskatchewan. However, despite considerable

debate and some action, Sheehan and Fullan (1995) maintain that there have been no significant breakthroughs in Canadian teacher preparation.

The situation in Canada is, therefore, different from that in many other countries and not without promise; however, this does not mean that the practice of teacher preparation here is unproblematic. Rather, it implies that we may have a little more time and opportunity to address the challenges that lie ahead in a world increasingly characterized by diversity, fragmentation, and economic rationalism. Indeed, the situation here could make it possible for Canadian teacher educators to lead the way in efforts to revitalize teacher preparation. Thus, building on Tolstoy's story, I argue that for teacher preparation to find itself and generate a source of hope and purpose in difficult times, it must do the important things, now, with the right people; namely, that:

- it must be located in collaborative partnerships between faculties of education and the field on the one hand, and between faculties of education and university faculties of arts and science on the other;
- such an arrangement calls for a reconceptualization of teacher preparation that does not uncritically abandon the concurrent program model; and
- provided faculties of education grasp the opportunity and reconceptualize both their mission and preparation programs, Canadian teacher educators can meet the challenges (currently facing their colleagues in other countries) that may lie ahead.

My purpose here is twofold: to show how a reconceptualization of Canadian teacher preparation will involve partnerships in and outside the university, and how these partnerships inexorably lead to interdisciplinary study and field-based teacher research in a reconceptualized concurrent preparation program. My argument is not against consecutive programs per se; rather, it is against the misguided and short-sighted US-influenced reform thinking that uncritically presumes that consecutive programs must become *the* dominant model for preparation.

Reconceptualizing Teacher Preparation

How can teacher preparation lead to constructive change in classroom practice? How can preservice programs prepare reflective, inquiring teachers of deep subject matter understanding capable of connecting complex concepts, skills, and actions with the minds and lives of an increasingly diverse body of student learners? My thesis is that recent US attempts to reform teacher preparation (Carnegie Forum, 1986; Holmes Group, 1986; Lucas, 1997) do not adequately address the needs and realities of the Canadian context. I also believe that the reform attempts in England and Wales (Gilroy, 1992) miss the mark. Thus I strongly contend that faculties of education have a critical role to play in the preparation of teachers in Canada, but that such a role will only materialize when they "rediscover their mission as professional schools, built around the moral and ethical responsibilities of teaching and preparing to teach and all the scholarly and service activities that would be expected to support, nurture and sustain this central purpose" (Soder & Sirotnik, 1990, p. 400).

Can faculties of education do this? With great difficulty, because they are caught on the horns of a dilemma. On the one hand teacher preparation has

become a less important piece in their operation. Labaree (1992) documents in an historical analysis how teacher preparation is no longer the centerpiece in faculties of education. It is forced to compete with a wide range of other programs whose prestige is frequently greater. One of the most intriguing features of the original Holmes Group is that it consisted of a group of deans from research university-based colleges of education who were arguing for the centrality of teacher preparation in their own institutions. Although the context in Canada is different, Sheehan and Fullan (1995) acknowledge that the location of teacher preparation in universities has proved problematic because of the emphasis in these settings on theory and research at the expense of practice and the difficulties that programs have in coming to grips with the prevalent social issues (e.g., cultural diversity, multiculturalism, etc.) of the day.

On the other hand, without teacher preparation, faculties of education would cease to exist. Goodlad (1990) notes that public policy-makers and other faculties and administrators on university campuses show little interest in faculties of education, save for their function as preparers of teachers. Moreover, Fenstermacher (1992) suggests that there would be little public lament if alternative routes to teacher certification became the predominant, if not exclusive, form of entry into teaching and faculties of education eventually ceased to exist.

Thus the current state of teacher preparation in North America can be characterized either as an attempt to change teacher preparation that is caught up in the agenda of saving faculties of education, or as a struggle to change the priorities of faculties of education as a way of saving teacher preparation. In my view many proposals for changing teacher preparation (Lucas, 1997) represent the former more than the latter. Whatever the motivation, much reform in Canada came about in the late 1980s and early 1990s because of a perception that there was both an urgency for and a window of opportunity to change teacher preparation programs (Fullan, Connelly, & Watson 1987). Many attempts at change were influenced by the Holmes Group (1986), which argued for the separation of subject disciplinary content from pedagogical processes. That is, disciplinary content was to be taught in the faculties of arts and science and pedagogical processes taught subsequently in the professional studies component of teacher preparation in faculties of education. Thus most attempts at reform in Canadian teacher preparation have essentially removed the concurrent preparation program format in favor of a consecutive one. Although this looks like a form of joint ownership in the university, I contend that it is analogous to an unconsummated marriage—the partners live and work in isolation instead of continually coming together to negotiate the realities of curriculum dilemmas. I also see it as a “Mephistophelean bargain” that is politically expedient to campus-based faculties: it bolsters undergraduate student numbers in the faculties of arts and science in return for acceptance of the existence of a faculty of education, but does little to improve teacher preparation. It represents horizontal and not vertical staffing; faculty members are committed to their own courses but not to the teacher preparation program *per se*. Thus, despite the good intentions of reformers, this approach tends to undermine the viability of academically rigorous professional programs steeped in pedagogy. Indeed, I believe that expedient proposals like those put

forward by reformers (Lucas, 1997; Holmes Group, 1986) could sound the death knell for the seemingly precarious future of both teacher preparation programs and faculties of education.

By contrast I argue not for the abandonment of concurrent preparation programs, but for a different understanding of their enactment. (There are concurrent preparation programs still in operation in Canada, but these have not figured highly in discussions of teacher preparation reform—hence my argument is with the clear trend in teacher education policy at major research universities toward the reinforcement of the consecutive model as *the* way to go to reform teacher preparation.) I posit that teacher preparation should not be “owned” exclusively by the university, that the area of responsibility for teacher preparation that does properly belong to the university is *de facto* co-owned by the faculties of arts, science, and education, which should be recognized *de jure*, and that teacher preparation is the joint property of the university and the field. With Tom (1995) I also contend that practice must precede knowledge and that vertical staffing with faculty teams committed to the program and to team-teaching must replace the current emphasis on horizontal staffing (faculty commitment to a course). And with Tom (1995) I am convinced that students need to have a shared experience with a cohort rather than the current emphasis on continual regrouping around courses.

To prepare teachers with a sense of hope and a deep subject matter understanding that is closely connected with pedagogy and learning, I call for two broad features in teacher preparation programs. First, in addition to being taught by cases that state theoretical claims relative to the complexity of classroom life, prospective teachers need to engage in classroom-based action research into dilemmas of teaching, such as investigating problematic aspects of the curriculum, attempting to understand learners’ conceptions of subject matter content, examining difficult student behavior, and exploring the beliefs students bring into teaching from their prior socialization in schools and how these beliefs affect their views of teaching and learning. Such collaborative inquiry is consistent with the idea that teacher preparation be co-owned by the university and the profession and with a call for practice before knowledge in the shared experience of a cohort staffed vertically by team-teaching university and field-based personnel. It would enable prospective teachers and their school associates to reflect together on the pedagogy needed to bring about learner understanding of important curriculum concepts. Second, I call for rigorous integration—as distinct from the current reform emphasis on separation where disciplinary content is taught in the faculties of arts and science and pedagogical processes are taught in the professional studies component in faculties of education—of liberal arts and sciences with professional pedagogy. Such a direction, underscoring both the co-ownership of teacher preparation between the faculties of arts, science, and education and the commitment to team-teaching of instructors representing diverse perspectives, would call for an arrangement whereby professors from the different faculties plan and teach courses collaboratively in order to give prospective teachers opportunities to see and make connections between disciplinary subject matter and related pedagogy. In short, it calls for an interdisciplinary approach.

*Integrating Liberal Arts/Sciences with Professional Pedagogy:
An Interdisciplinary Approach*

I am arguing for a different approach to teacher preparation from that put forth by US reformers. I contend that if we are serious about wanting teachers to transcend the way they were taught as school students, then we must begin to integrate the liberal arts/sciences and pedagogy components of teacher preparation. One aim of such an integration would be to create a situation in which university-based teacher educators (i.e., professors in the faculties of arts, science, and education) are exposed to and provided with opportunities to practice much-needed, up-to-date pedagogy. Only in this way can we potentially change the typical lecture approach that characterizes the presentation of knowledge in most disciplines at the university. For teacher educators, then, the structural arrangement of team-teaching-integrated content and methods classes would provide the challenge of employing the pedagogical approaches they espouse. For example, instead of lecturing prospective teachers about constructivism, teacher educators would attempt to engage preservice teachers in the constructivist processes that are related to the content they are learning.

Typically elementary teachers take two years of undergraduate arts or science courses before entering education to complete a BEd. By contrast, secondary teachers complete a major and a minor in the academic disciplines before undertaking professional studies and a practicum. Once in the work force elementary teachers are typically criticized for their lack of content in academic subjects such as science, mathematics, and English language arts, and secondary teachers for their preoccupation with their subject discipline and their inattention to pedagogy and how children learn. One important provision, then, must be for secondary preservice teachers to learn from experiences typically associated with elementary teacher preparation (and vice versa), while not jeopardizing the integrity of the subject matter they need to study in depth. To safeguard the integrity of the subject matter teachers need to study in depth, I propose an interdisciplinary approach.

An interdisciplinary approach can be conceptualized around the following four subject areas: the humanities (English, social studies, languages, etc.), the sciences (mathematics, biology, chemistry, computer science, physics, etc.), the fine arts (music, art, drama, dance), and the practical arts (physical education, business education, technological education, home economics). Preservice elementary and secondary teachers would take a preliminary course designed to introduce them to interdisciplinary thought by providing an overview of the different ontologies, epistemologies, content, and methods of each of the four areas. This course, team-taught by arts, science, and education faculty, would examine how knowledge is constructed in each of the areas and would look closely at the connections and relationships that exist between the different disciplines that comprise the four areas. The emphasis would be on developing a critical understanding of the different perspectives and world views that each area represents. Such an overview course would by definition not provide the subject matter depth that secondary teachers require. Consequently, secondary preservice teachers would choose one of the four areas for specialization, whereas elementary teachers would continue to immerse themselves in all four areas. This is not to suggest that elementary preservice teachers would be

undertaking more study than their secondary counterparts; rather, it is to emphasize that whereas secondary preparation would focus on *depth*, elementary preparation would emphasize *breadth*. Secondary specialization in an area, then, would through team-taught thematic inquiry entail the detailed examination of both the structure of knowledge in each of the disciplines that make up the area, and also how the disciplines could combine to address real-world problems. By contrast, elementary general immersion would through similarly team-taught thematic inquiry use real-world problems as pointers for exploring the disciplinary knowledge contained in all four areas.

I am not unaware of the implications of what I am proposing here for the typical university faculty and departmental structure. Because departments are characteristically organized along subject discipline lines, the effects in many institutional contexts would be dramatic, if not drastic (see Dittmer & Fischetti, 1995, for a trenchant description of what happens when teacher educators try to practice what they teach).

The counterargument—that one must take account of the existing culture of the institution—is one that I have used myself to demonstrate the power of a culture of collegiality in enabling teachers' professional development (Grimmett & Crehan, 1992). However, I also pointed out that cultures can just as easily become stifling as they can be enabling. My purpose here, then, is to go beyond Sheehan and Fullan's (1995) contention that the location of teacher preparation in Canadian universities has been problematic to pose a fundamental question about the nature of teacher preparation per se. My point is that it is not the *move* to universities from normal schools that has proved problematic, but the existing *culture* (and accompanying *structure*) of research-based universities in which teacher preparation programs have been lodged. My contention is that it is highly problematic when we accept that culture and that structure as taken-for-granted aspects of higher education-based teacher preparation. Thus I call for a critical examination of university culture and structure, not to remove teacher preparation from the university setting, but to provoke debate about how its practice can be reconceptualized. If the purpose of restructuring is "one of changing the organization so that good ideas and strategies born in practice can flourish and not be stymied by existing bureaucratic forces" (Grimmett, 1995, p. 210), then it is vital that reconceptualization precede any attempt at restructuring, not the other way round.

Bringing about an integration of the liberal arts and professional pedagogy is only one aspect of the reconceptualization I propose. On its own it will not enculturate teachers into the practice of teaching. In combination with an emphasis on teacher research, however, I believe it could become powerful.

Teacher Research

The reconceptualization of practice in teacher preparation that I am calling for also rests on the premise that learning to teach can only be developed through regular and intensive classroom-related inquiry into (a) the subject matter being taught and students' understanding thereof, (b) everyday dilemmas of practice, (c) collaboration and collegiality, (d) social issues and institutional constraints affecting learning, and (e) professional entrance. I envisage five broad types of teacher research for both elementary and secondary preservice

teachers: learner-oriented explorations of subject matter, teacher-oriented inquiry of the action setting (leading to collegial exchange), collaborative inquiry, critical-analytical inquiry, and internship inquiry. It needs to be underscored here that whereas the proposed integration of liberal arts and education courses would provide for the separation of secondary from elementary preservice teachers for purposes of subject matter specialization, the teacher research experiences would not. I deem it important that secondary preservice teachers learn from and with elementary ones and vice versa. Given the provision for secondary teachers of subject matter specialization wherein the integrity of the discipline is upheld and the provision of a generalist orientation for elementary teachers, I would maintain strongly that the needs of elementary and secondary teachers thereafter are similar in that they all need to learn how to represent knowledge in ways that make it comprehensible to learners.

Learner-oriented explorations of subject matter. This action research focus is complementary to the integrated approach to academic content and professional pedagogy outlined above. The initial focus is on understanding the structure of thought in the discipline or disciplines of the subject area preservice teachers have chosen to teach. A parallel focus is on understanding how students learn, so that the primary focus of this exploration then revolves around how connections can be made between subject-related materials or ideas and the minds of learners. To do this preservice teachers need to study learners individually and in groups to discover how learners make sense of a given concept. In other words, their initial orientation to classrooms becomes one of observation carefully structured around examining how children think about the subject matter they are learning. Through probing and sensitive interviewing, preservice teachers attempt to uncover learners' conceptions and misconceptions. Schön (1988) talks about this as "giving him reason" (p. 21) and "getting curious about what kids say and do" (p. 20). During this inquiry preservice teachers explore children's reasoning using different activities and processes. Once they have developed hypotheses about how children make sense of particular concepts, this type of research would then launch them into speculating different strategies for teaching those concepts efficaciously and trying them out in practice.

Teacher-oriented explorations of the action setting (leading to collegial exchange). This research focus is framed around the individual preservice teacher's concerns and dilemmas that arise in the action setting of the practicum. Preservice teachers are typically motivated to pursue inquiry into their practice when they encounter practical dilemmas in their classroom teaching. Typically they experience dilemmas when "the practical situation is one in which the traditional instructional practices have been destabilized and rendered problematic by pupil resistance or pupil 'refusal to learn'" (Elliott, 1990, p. 47). These dilemmas usually pertain to difficulties with curriculum, pedagogy, or assessment in classroom teaching, for example, their difficulty connecting material or ideas to students' minds and ascertaining the extent of their effectiveness. But they also frequently relate to specific students and their patterns of behavior in the group setting of the classroom. When the practice of preservice teachers is rendered problematic by dilemmas touching student learning, they become open to the prospect of inquiry. Their minds are typically filled with questions such as:

How will the change work out? Can I carry it out successfully? And to what extent will the students' learning be enhanced? Such questions are hard to deal with in isolation. There is something about them that motivates both teachers and preservice teachers to talk to one another, to seek support from their colleagues. Engaging in collegial discourse about one's classroom dilemmas in a mutually supportive learning community enables the difficulties of student learning and behavior to be addressed and in some cases resolved. When preservice teachers subject to the scrutiny of supportive colleagues the changes they have made and are making in classroom practice, such changes take on the nature of provisional hypotheses for action that can be examined and closely monitored.

Individual teacher inquiry inevitably connects with collaborative inquiry in that the process usually engages them in collegial discourse. What is still individual, however, is the nature of their practicum placement. To make the inquiry truly collaborative entails being placed in a team-teaching situation.

Collaborative inquiry. This type of research takes place in a team-teaching situation. Here cohorts of preservice teachers are placed together in one practicum setting. As I first suggested 10 years ago (Grimmett, 1988), a cohort of, say, five preservice teachers could be placed with two school associates (or cooperating teachers) and one faculty associate or faculty member. Such a setting would provide opportunities for teachers to engage in the "learning of content in context" (Lieberman, 1994, p. 20) in an environment where issues can be "clarified and resolved in free and open discourse, characterized by mutual respect and tolerance and an absence of hierarchical power constraints" (Elliott, 1990, p. 48). These teams would brainstorm, plan, implement, and then critique teaching together. The focus would be on creative and critical pedagogical thinking. The purpose would be to break down conventional norms of teaching—for example, the individualism, privacy, reticence, self-sufficiency, and isolationism, and so forth that Bird and Little (1986), Chism, (1985), and Lieberman and Miller (1990) describe—through an innovative structuring of collegial, inquiry-oriented teams. Any proposed changes in teaching can be tested out in the action setting, thoroughly discussed in the inquiry-oriented collegial team, and then reported to other teams engaged in teacher preparation.

Critical inquiry. This teacher research focus is more critical in nature than teacher-oriented or collaborative inquiry. Through structured observation of other practitioners at work, preservice teachers would attempt to understand how the social context of schools and classrooms affects student learning by examining a pedagogical dilemma that occurred during their practicum experience. For example, elementary preservice teachers might look at how children who live in poverty-stricken conditions make sense of a teacher's invitation to write creatively, and secondary preservice teachers could investigate how the changing youth culture of today affects adolescent learners' attempts to construct the reality of literary novels and Shakespearean dramas. This type of research, occurring as it does after a lengthy practicum, would give preservice teachers the opportunity to study the more profound and troubling questions they have about teaching and learning, particularly those taken-for-granted assumptions and constraints on learning that are part of the systemic context of

bureaucratized schooling. This research would culminate in a project report or some other form of representation. In other words, preservice teachers would be engaged in analyzing classroom situations for the impact that curriculum, pedagogy, assessment, organizational constraints, and power relationships have on student learning.

Internship inquiry. This last type of teacher research takes place during the induction phase of teacher education. Teachers spend their first year of teaching as an intern (a position with reduced pay and workload that is analogous to architects' and lawyers' articling or medical practitioners' residency) and are required to conduct research into the dilemmas of practice they encounter on entering full time the social and political context of schools. As interns teachers would be expected to continue to interact with the faculty of education. This type of teacher research is, therefore, designed to help teachers enter the work force by fostering greater collaboration between teacher educators and school practitioners. During the year's internship, faculty associates or faculty members would regularly visit first-year teachers' classrooms. Such provision would give beginning teachers an opportunity to gain further knowledge and confidence before taking on the full responsibility for student learning. This transition would also provide further opportunities for preservice teachers to maintain a focus on those dispositions and pedagogical assumptions that are central to the intellectual and moral aspects of the practice of teaching.

I propose a reconceptualization of teacher preparation practice around an integration of interdisciplinary subject matter with pedagogy and teacher research. I believe such a direction holds much potential for developing empowered teachers; I am also aware that it also holds implications for how teacher educators direct their energies.

Teacher Educators:

Team-Teachers and Facilitators of Classroom Action Research

It follows from the above proposal that teacher educators need to reconfigure what they do around team-teaching and the facilitation of practitioner inquiry. Such a reconfiguration would involve teacher educators in working collaboratively and planning assiduously with colleagues in the field, other faculties, and their own faculty. It would also involve them in building a culture of inquiry, exposing teachers¹ to alternative views and practices, and providing organizational support for preservice teacher research groups.

Building a culture of inquiry involves sustaining large blocks of uninterrupted time for teachers to talk in teacher research group meetings. The nature of teacher research demands self-disclosure, so it is important to take time to develop a trusting atmosphere where teachers feel safe to take risks to disclose themselves and their practice. The inquiry process is typically initiated by teachers in response to a particular practical situation or dilemma that they face. The teacher educators' responsibility is to facilitate the group process through sensitive and supportive questioning, to crystallize, and focus the collaborative discussion. Their specific actions would revolve around framing the conditions of inquiry, accepting tension and dealing with conflict, modeling collegiality and experimentation, focusing teacher talk on action, enabling teachers to frame their inquiry, and connecting action with student learning.

In framing the conditions of inquiry, teacher educators need to use a framework (see Dockendorf, 1995, for an exemplar) that releases teachers' reflective writing, conversations, and collaborative work in preparation for developing questions of inquiry. Such a framework, however, can serve only as a heuristic and never as a predictable agenda. Thus it is important to be flexible, responsive, and willing to change the focus based on the needs of a particular group of student teachers at any given time. It is also important that all groups have a trusting, sanction-free environment that sustains interpersonal relationships and a focus on collaborative action. Such an environment permits tapping into the deep reservoir of ideas and experiences that inquiring teachers bring with them as individuals. It also enables them to feel comfortable expressing the uncertainties and questions inherent in their daily practice. Without this comfort with discomfort, meaningful and compelling research questions rarely materialize.

One way teacher educators can nurture these conditions is by continually modeling the acceptance of tension and conflict as basic to their own and others' practice. In so doing they would permit teachers to work through any conflict among themselves and for themselves. This would also involve them in modeling collegiality and experimentation in their own practice. They would take risks and make commitments; for example, taking part in the rigorous discussion of teaching and learning that accompanies the observation of classroom practice, occasionally bringing up their own dilemmas of practice for critique. In this way they would set the tone for focusing teacher talk on action; that is, they would attempt to ensure that teachers examine their practice as it affects student learning. The closer teachers' research questions are to their classroom pedagogy, the more compelling their inquiry.

When teachers have a question to pursue, the teacher educators' responsibility is to ask questions, provide resources, or suggest alternatives for designing the inquiry project. A further task is to make explicit connections between classroom actions and student learning as teachers engage in identifying issues, dilemmas, or questions. This process frequently entails focusing, redirecting, or provoking conversations that connect the action of teachers' research to student learning.

In order to facilitate experimental action in classrooms, it is important to provide teachers with frameworks that sensitize them to examining critically the daily dilemmas of teaching, to reflect on the taken-for-granted societal and personal assumptions that pervade their action, and to reframe problems of practice from the perspective of the learner. Like all practitioners teachers are prone to overlook the basic premises that undergird their classroom action. Sometimes these basic premises constitute humanly constructed distortions that teachers have uncritically accepted as valid. At other times such premises constitute outright biases about teaching and learning that have little justification. Because change in practice is so dependent on change in beliefs and values, it becomes necessary to help teachers examine collaboratively those beliefs and values that they take for granted.

Teachers do not change their instructional practices, nor do they enthusiastically begin collaborating with one another to create a fresh vision for such change without first being challenged to think differently about the daily

dilemmas of practice that they face. Such challenge can be provided by teacher educators who expose teachers to alternative ways of viewing practice. The purpose here is to prevent what Hunt (1987) termed "a hardening of the categories," that is, teachers becoming entrenched in a narrow and shallow way of looking at their world and their work. Exposing would-be teachers to alternative forms of practice is one way teacher educators can challenge them supportively.

Providing organizational support for teacher research groups would involve teacher educators in acting as advocates at the school and university level for the allocation of appropriate resources, both fiscal and human, to restructure teacher preparation through teacher research groups. This advocacy would also include a focus on improving policy so that it supports and does not counteract the practices associated with such development. Supporting the continuous investigation of classroom practices, the systematic exploration of central issues in student learning, and the reporting of research findings to a wider community, is one way teacher educators can establish the conditions under which beginning and experienced teachers can become engaged in the transformation of schools into places of learning.

This reconfiguration of what teacher educators can do suggests that it is not a role involving a hierarchical position with its accompanying agendas of power and control, but a series of interrelated tasks designed to transform the experience into one that sustains a rich conversation about pedagogical possibilities by engaging collaboratively with colleagues and involving prospective and practicing teachers in classroom action research and observation. The primary task of teacher preparation is thus pedagogical, working with student teachers to help them represent knowledge in ways that make it comprehensible to diverse learners in a rapidly changing social context by collaboratively addressing the vexing questions and perplexing dilemmas inherent in daily practice.

Conclusion

Can Canadian teacher educators meet the challenges that potentially lie ahead for them? I believe they can, provided they do the important things right now, with the right people. That is, teacher educators need to reconceptualize their mission as enculturating teachers into the practice of teaching with a sense of hope and purpose, now, in collaboration with other colleagues in higher education and the field. This would involve teacher educators in reconfiguring, not abandoning, the concurrent program model by bringing together discipline-based knowledge with practical knowledge of teaching, necessitating two broad features: (a) students need to engage in action research into dilemmas of teaching; and (b) rigorous integration of liberal arts and sciences with professional pedagogy is essential. The first emphasis would dramatically change what teacher educators do from conventional practices of transmission to those of facilitation, for example, building a culture of inquiry, exposing teachers to alternatives, and so forth. The second direction would call for professors from different faculties to teach courses collaboratively in a manner that gives students opportunities to make connections between subject matter and related pedagogy. Such purposeful reconceptualization then permits the introduction

of alternatives, for example, the initiation of professional development schools (PDSs), or collaborative, school-based programs, or the transcending of traditional one-on-one practicum placements to having cohorts present at one site. My thesis is that these alternatives all become less problematic when they derive from (and do not precede) a careful and purposeful reconceptualization of the practice of teacher preparation. Moreover, they serve to foster a sense of optimism that teacher educators can have a positive influence on practice, which in turn energizes them to fulfill their calling to teach teachers. Only then can teacher preparation contribute constructively to enhancing the learning of society's young in a rapidly changing and disintegrating context.

Some may consider what I propose to be like digging a scholarly grave—what university-based educator really wants to put in all that time with the field and faculty colleagues? I prefer to think of it in Tolstoy's terms of digging beds for the somewhat frail and fatigued purposes of teaching, a commitment that could in surprising ways build powerful alliances with the field and other faculties that when the harsh winds of political restructuring blow in Canada (and blow, I predict, they will), could provide much-needed protection for higher education-based teacher preparation. However, if these challenges are not met quickly and decisively, then I fear that even here we could witness the demise and eventual destruction of university-connected teacher preparation.

I do not wish to end on that note, for the future of teacher preparation lies in a search for deeply grounded hope (not the optimism brought about by alternative arrangements) and purpose—the art of the possible—when the whole enterprise has in many countries come under close scrutiny, if not scurrilous attack. Fullan (1997) attempts to grapple with the notion of hope. He defines it as “the capacity not to panic in tight situations to find ways and resources to address difficult problems,” suggesting that “lost causes” are the only ones worth fighting for (p. 221). He further maintains that Goleman's (1995) notion of emotional intelligence (i.e., self-control, zeal, persistence, self-motivation) is an important factor in success and that people possessing this intelligence are generally optimistic. In similar vein I would argue that teacher educators need hope because teacher preparation often seems like a lost cause in the institutional context of higher education. But it is hope that they need, not optimism. The important question to address is how do teacher educators derive a sense of hope—“the capacity not to panic in tight situations to find ways and resources to address difficult problems”—in the context of their work? Put differently, how do the qualities of self-control, zeal, persistence, and self-motivation contribute productively in the daily toil of teacher preparation? Although I agree with Fullan's claim that the qualities of emotional intelligence (as Goleman, 1995, defines them) are important to success, I contest his assertion that people who possess them are generally optimistic. Rather, I would suggest that they are hopeful.

Optimism expects things to get better. Often they do not! By contrast, hope, regardless of circumstance, entails purposefully acting as if working toward the good is possible. It involves deliberately eschewing traditional patterns of acting, for example, doing only what is rewarded by higher education institutions and so forth, in favor of taking risks and making commitments, such as facilitating teacher research and engaging in interdisciplinary team-teaching

and course planning. To act in hope is to choose deliberately to see one's work as a genuine contribution, a meaningful service, with integrity, perseverance, courage, and imagination that touches others' lives in a positive way. To act as if there were nothing more important in the world than working with prospective teachers to foster their understanding of pedagogically oriented subject matter and to facilitate inquiry into student learning can motivate a level of hope-filled action one might not otherwise realize. To act as if one's work as teacher educator is an important mission can override assumptions and actions governed by the anxiety and uncertainty inherent in current conditions that undermine one's ability to focus on what is important and to act with energy and purpose. In short it can engender the renewal of hope that is so crucial to the preparation of those who are destined to touch and shape the future.

Note

1. The term *teachers* refers primarily to preservice candidates, but also includes school-based teachers and colleagues in the faculties of arts, science, and education who fulfill an important responsibility in teacher preparation.

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Seeking Ethnocultural Equity Through Teacher Education: Reforming University Preservice Programs

This article argues that significant reform is needed in Canadian faculties of education to address adequately social justice on issues of ethnicity, culture, and racism. Teacher education programs can model and provide equitable educational opportunities for preservice teachers and promote equity for all students in public schools. Addressing multicultural education and antiracist education specifically, the article provides an overview of current issues and debates in this field. Attending to equity and pluralism in teacher education involves overcoming several challenges; a sampling of some exemplary programs and promising developments in this area provides some specific directions for further meaningful reforms.

Cet article affirme qu'une réforme en profondeur doit forcément se produire dans les facultés d'éducation au Canada si l'on veut aborder de façon convenable l'étude de la justice sociale au sein des questions d'ethnicité, de culture et de racisme. Les programmes de formation des enseignants peuvent servir de modèles, offrir des possibilités d'instruction aux enseignants en formation préalable et promouvoir l'équité vis-à-vis de tous les élèves dans les écoles publiques. En abordant l'éducation multiculturelle en général et l'éducation antiraciste en particulier, l'article présente une vue d'ensemble des questions et des débats courants du domaine. Afin d'assurer l'équité et le respect du pluralisme dans la formation d'enseignants, il est nécessaire de surmonter de nombreux obstacles. La présentation de certains programmes exemplaires et de démarches prometteuses dans ce domaine sert de guide pour de nouvelles réformes significatives.

Teacher educators are positioned to play an instrumental role in contemporary Canadian society by virtue of their pedagogical contact with a future generation of public schoolteachers. Many in the academy have begun to take up the challenge of addressing inequities existing in educational contexts in this country's pluralistic society. I argue below that although individual commitment to social justice on issues of ethnicity, culture, and racism is admirable, it is an inadequate end goal considering the significant reform needed in faculties of education. The way Canadian universities structure teacher education programs will be instrumental in their fulfillment of a crucial democratizing purpose: to ensure that equitable educational opportunities exist for all students regardless of their ethnic, cultural, or racialized identities.

I begin with a brief introduction to one wide swath of the larger fabric of social justice education, limiting my focus to addressing multicultural education and antiracist education as they have been defined and used in their brief existence. Following an overview of current issues and debates in this field, I

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explain the need for addressing ethnocultural pluralism¹ in teacher education programs. Noting several key challenges, I offer some promising directions for meaningful reforms.

Exploring Multicultural and Antiracist Education in Canada

In its relatively brief history the field of education attending to equity issues has undergone much transformation in response to a dynamic social milieu. Specifically on ethnocultural and racial issues it has evolved in the past few decades under the umbrella of multicultural education with significant influences from, and interactions with, antiracism and other perspectives (Fleras & Elliot, 1992; Moodley, 1995; Young, 1995). I situate this discussion in the specific sociopolitical context of Canadian postsecondary education and public schooling. However, with much of the research and theorizing in this area informed by United States conceptions of multicultural education and British formulations of antiracism, I also draw on insights from some of these sources.

Canada is unique in that remains one of the few nations with multicultural ideals entrenched into national government policy, most recently in the 1982 *Canadian Charter of Rights and Freedoms* and the 1984 *Canadian Multiculturalism Act*. As well, this country's historical immigration patterns and policies, social and educational institutions, and public responses differ in significant ways from those of other countries, affecting the singular development of Canadian educational policies, curriculum, research, and practices in this area (Fleras & Elliot, 1992; Kymlicka, 1995; Moodley, 1995; Wilson, 1981). Currently there is strong public debate in Canada about the value of any form of education for ethnocultural equity, and indeed of the concept of multiculturalism itself. The most vocal critics call for its immediate abolishment (Bibby, 1990; Bissoondath, 1994); in these arguments multiculturalism is identified as a primary cause of ethnic tensions in Canada, and cultural diversity itself is positioned as a threat to national unity and traditional values. A comprehensive rebuttal and cogent critique of some of these and other antimulticulturalism writers appears in Puttagunta (1998). It is noteworthy to mention here that so-called antiracist perspectives may engender even greater hostility, misunderstandings, and resistance among many Canadians.

In addition, some Canadian researchers depict ethnocultural equity education as a divisive field of study, describing conflicts between multicultural and antiracist camps in dichotomous, oppositional terms (Kehoe, 1994; Mansfield & Kehoe, 1993; McGregor & Ungerleider, 1993). I wish to avoid simplified bipolar constructions or positions that deny the complexity of school-based activism. In the daily practice of Canadian activist educators, academic debates are largely ignored, while labels like *multicultural education* and *antiracist education* are often used simultaneously or in contradictory ways in initiatives challenging discrimination (Berlin & Alladin, 1996; Cogan & Ramsankar, 1994; Lund, 1993; Smith & Young, 1996). For example, in certain circumstances "many activists may use such a [multicultural] discourse to build antiracist coalitions" (Roman, 1993, p. 83). I acknowledge the strategic uses of conflicting terminology toward progressive ends, and focusing on those "educators and students scrutinizing the common ground, as well as the conflicting moral and political stakes, of the discourses of multiculturalism and anti-racism" (Roman,

1993, p. 83) seems a useful way to address the complexity of language choices and political positioning in this field.

Some scholars observe remarkable agreement among researchers and theorists addressing ethnocultural concerns (Banks, 1995; Fleras & Elliot, 1992; Gay, 1995; Lyons & Farrell, 1994). In a recent comprehensive review of the US literature in this field, Gay (1995) reveals a “high degree of consensus ... on the major principles, concepts, concerns, and directions for changing educational systems to make them more representative of and responsive to the cultural pluralism that exists” (p. 40). Fleras and Elliot (1992) view antiracist education in Canada as “situated squarely in the category of multicultural education” (p. 313) while offering a more radical “edge” for addressing diversity in school systems. Between multicultural and antiracist perspectives in Canada, Mock (1996) notes, “in fact there are intimate connections, historically and particularly in the legislation. One cannot be achieved without the other” (p. 5). Addressing a large cross-Canada study of teacher attitudes, Solomon and Levine-Rasky (1994) also find commonalities between the two approaches including “links to civil responsibility, moral accountability, enhanced political sensibility, and critical participation embedded within a commitment to work on equity issues” (p. 63). Such conciliatory perspectives, although apparently denying key ideological differences between certain articulations of each position, evince a contingent means of achieving political solidarity against injustice. Reflecting the pluralism being addressed, educators need not speak with a single consensual voice. Educators currently addressing diversity issues most often occupy shifting spaces between and across multicultural and antiracist perspectives—not necessarily a middle ground—but one I broadly refer to as education for ethnocultural equity.

Becoming Critical: A Transformative Endeavor

There is a growing recognition by many researchers and activists of the politicized nature of their work around ethnocultural pluralism, and of the pressing need for coalition-building to influence educational policy and structural concerns. Rather than focusing primarily on harmonious intergroup relations through prejudice reduction workshops and minor curricular supplements, more educators and researchers than ever seek to implement school reform on a systemic level. From this more critical stance, as Gay (1995) recognizes, educators acknowledge “that the democratic and human rights imperatives demand that existing educational programs, structures, and practices be reformed to make them more accessible and responsive to groups that historically have been oppressed, silenced, and disenfranchised educationally, economically, and politically” (p. 41). This approach allows for the critical examination of inequities in curricular content, teaching practices, hiring procedures, and policies. Educators interested in what have been considered antiracist concerns—akin to variants of US “critical multicultural” stances—may find support from a number of authors addressing practical implications for schools (Fleras & Elliot, 1992; Ghosh, 1996; Gillborn, 1995; SooHoo, 1995; Nieto, 1996; Sleeter, 1996; Troyna, 1993).

A growing number of teacher educators and researchers adopting multicultural and antiracist education have become committed to transformative goals

of education. Ladson-Billings (1995) argues that “as the logical translator of theoretical and conceptual notions about diversity into real-world practice in the nation’s classrooms” (p. 756), teacher education occupies a vital position between ethnocultural equity theory and practice. She notes that because theory development and practice do not happen separately from one another, there is a “synergistic and dynamic relationship that exists between the two. Practitioners are not merely waiting for scholars to develop theory before they begin to try new approaches to pedagogy” (pp. 752-753). Teacher educators hold an important station from which to influence preservice teachers’ practice; by studying their own practice in this endeavor they can reciprocally inform their research and theorizing around multicultural and antiracist pedagogy.

Seeking Exemplary Models in Teacher Education

Taking the lead in transformative efforts have been some US scholars working to modify preservice programs from a critical multicultural position (Banks & Banks, 1995; Cabello & Eckmier, 1995; Jordan, 1995; McCall, 1995; Noordhoff & Kleinfeld, 1993; Phuntsog, 1995; Shade, 1995). In a recent comprehensive review of exemplary programs, Hidalgo, Chávez-Chávez, and Ramage (1995) found that “teacher educators often have taken the lead in advocating school reform and increased teacher engagement in the public schools” (p. 774). However, these are too often the exception rather than the rule in teacher education. Grant and Secada (1990) located just 23 studies of US universities addressing pluralism from 1964 to 1988. In a subsequent revisiting of the literature Grant (1994) located 44 studies pertaining specifically to multicultural teacher education—still a relatively small number. He charges that US teacher education programs in general have not kept up with the changing demographics of contemporary schools, lamenting that “the subject matter, content, and nature of the experiences offered in preservice courses have undergone little change, especially in comparison to the clearly unmet needs of urban students and students of color” (p. 1).

The situation in Canadian universities mirrors these observations, with few academic accounts of teacher education programs on issues of racialized and ethnic diversity and equity. A recent survey of the literature reveals a small number of journal articles documenting modest modifications to Canadian university and college education programs (Britzman, Dippro, Searle, & Pitt, 1997; Henley & Young, 1989a; Lyons & Farrell, 1994; Nimrod & Emberg, 1995; Solomon, 1997; Young, 1995). In addition, little research is ever done on these programs; Young (1995) criticizes the disappointing lack of academic accomplishments to date in the struggle for ethnocultural equity in education:

Faculties of education have contributed little to this struggle and have received little attention in the multicultural or anti-racist education literature in Canada. While some faculty members have taken part in the critique of school practices (and have built academic careers theorizing about such practices) our own worksites and practices have been virtually ignored and left beyond critique. (p. 45)

Teacher educators and researchers wishing to take up this significant challenge confront a long history of inaction variously explained as apathy, in-

tolerance, or some other combination of bureaucratic afflictions. Seeking meaningful reforms in this context offers challenges, but the alternative of maintaining the status quo in the face of ongoing inequity and discrimination seems downright irresponsible.

Getting Beyond Peripheralization

Based on their study of university calendars from across Canada, Henley and Young (1989a) conclude that a focus on diversity in teacher preparation "is not afforded a high priority in many Canadian universities and that where multicultural education is addressed it is often done through isolated course offerings which cannot possibly provide to students the kind of exposure necessary to address adequately the complexity of the culture-society dynamic" (p. 27). Granted many educational foundations courses include topics such as diversity, pluralism, or multiculturalism, but their treatment in class depends on the expertise and experience of the individual instructors. Some teacher education programs offer optional courses on specific issues such as Native education or bilingual instruction. A small number of universities have developed separate degree programs in these fields or related areas such as intercultural education (Friesen, 1991; Young, 1995).

Some may view the above developments as evidence of a promising trend, but others contend that such additions offer the teaching profession a disservice, just as "celebratory" multicultural programs in schools are criticized for being superficial and culturally essentialist. These few supplementary courses may help marginalize people based on differences and push diversity issues into the narrow spaces of "special days" or add-on units included only when time allows. This supplementation or "tinkering" does little to address systemic inequities in schools or universities, nor does it necessarily help usher in meaningful changes across the program. Grant (1994) concludes that "the common response of merely adding multicultural courses to the curriculum of teacher preparation is insufficient, ineffective, and potentially misleading—even damaging" (p. 7), yet it remains the typical response of faculties of education to calls for change. A brief analysis of a specific Canadian university program with which I have personal experience illustrates the continued peripheralization of this field.

In a recent study of the teacher education program at the University of British Columbia, Stovel (1996) surveys the course offerings and content and reports on interviews with 16 people—including students, faculty, and administrators. She reveals that the nature and substance of multicultural or anti-racist curricular "content depends more on the instructor than on the course" (p. 11). Students and professors alike experience that one instructor might deal specifically with any equity pedagogy while another may choose to avoid it entirely; in fact, one instructor specifically avoided broaching any "uncomfortable issues" in or out of class, even when pressed by students to do so (p. 11). Similarly, topics listed on course syllabi related to diversity and equity are often dropped due to a lack of time. Stovel surmises that multicultural and antiracist education need not "be treated as a separate topic ... [but] should be continuously incorporated in the curriculum and reflected in the teaching methods" (p. 17). In another study of the UBC teacher education program, 48

beginning teachers completed retrospective surveys (Housego & Badali, 1996). Although ethnocultural equity issues were not among the survey items, in the open-ended section some respondents expressed a desire for more relevant optional "courses contributing to understanding ethnic minorities" (p. 388) and recommended better "practical preparation for dealing with multicultural issues" (p. 390). To what extent any such reforms will be implemented at UBC remains to be seen in the near future as the teacher education program is currently under review, but early indications reveal no substantive modifications addressing ethnocultural equity.

Research on teacher education in the US seems unanimous that for substantive reform to occur in a program, an "infusion" of social justice principles must take place across the curriculum of the entire faculty (Cochran-Smith, 1995; Grant, 1994; Hidalgo et al., 1995; Shade, 1995; Zeichner & Hoefft, 1995). Even so, what this might look like in program design and implementation, course content and configuration, and practicum components for Canadian universities remains largely theoretical. The addition of one or two new "multicultural" or "diversity" courses is the most likely response from a university administration addressing ethnocultural equity issues specifically, despite the limited impact on preservice teachers. I recommend a more broadly integrated model of reform for substantive changes in the outcomes for teacher education candidates.

Pursuing Systemic Changes in a Conservative Climate

There are no simple prescriptions for a clear path to be pursued by teacher education programs seeking to become more equitable and responsive to the needs of a diverse society. Numerous practical considerations include a significant modification of a teacher education program entailing faculty retraining, major revamping of existing courses, and other substantive changes requiring considerable time and effort. For example, adopting an intensive professional development program involves revising schedules, reallocating resources, and establishing mechanisms for ongoing input and modification. Clearly a strong administrative commitment and reliable funding sources are necessary for substantive reforms to existing systems. Indeed having influential leadership spearhead such initiatives is cited as a key factor in the success of such reforms (Britzman et al. 1997; Nimrod & Emberg, 1995; Shade, 1995).

A significant obstacle is the current political climate of cutbacks and pressure from conservative education reformers emphasizing uniformity and a return to "the basics." At first glance a push for higher standards seems reasonable, yet motives for these initiatives may include supporting existing hierarchies and inequities (Barlow & Robertson, 1994). A conservative social climate entails often tenacious resistance to any equity reform efforts in teacher education programs and in schools (Apple, 1993; Fleras, 1996; Lund, in press). This can be especially daunting for junior faculty and beginning teachers, who are in many ways the least powerful agents in their institutions.

During a time of fiscal restraint and conservative rhetoric, education for ethnocultural equity becomes an especially contentious issue for administrators and faculty alike. Fleras (1996) describes an antagonistic climate in Canadian universities, often because "antiracist initiatives have been

denounced as irrelevant in the absence of empirical proof of a 'problem.' They have also been criticized as a misallocation of scarce resources, unnecessarily inflammatory or divisive, and unbecoming to a university enterprise" (p. 78). Those who implement such reforms may be criticized that their initiatives "spring from motives for damage control or empire-building, rather than for compassion or justice" (p. 78). Fleras advises that "responding to this challenge will entail both political will and financial muscle, at a time of fiscal restraint" (p. 83), no small challenge to teacher educators in the academy. They must continue to invent innovative funding initiatives for new programs, seek collaborations with not-for-profit community agencies, and organize effective lobbying for increased expenditures in this area. Although progressive teacher educators face a rising tide of "equity backlash" that threatens what little gains have been made, it is important to note that much of the resistance to such change in the academy originates from within.

Facing Conservatism in Teaching

Many observers recognize that teaching is a traditionally conservative profession with practitioners who typically resist change and innovation (Fullan & Hargreaves, 1992; Sleeter, 1992; Solomon, 1995). In a study of 1,002 teachers across Canada, Solomon and Levine-Rasky (1994) explored the dimensions of resistance to multicultural and antiracist education. They assert that, overall, "given the stability of the teaching culture and the ideological perspective that informs it, together with the depoliticized and uncritical framework of teacher education institutions, the relative lack of self-awareness and 'race' consciousness that teachers demonstrate is rationalized" (p. 11). A difficulty faced in efforts to address embedded ethnocultural inequities with teachers is their consistent avoidance of contentious issues. Indeed, Solomon and Levine-Rasky find that educators reveal "denial and reluctance to name the problem of racism and thus the need for an antiracist pedagogy remains a most tenacious obstacle" (p. 12). In a discussion of the above study Solomon (1995) finds the terminology of oppression and conflict especially problematic for many teachers; in fact, such "discourse may generate more dissent than teachers are prepared or even care to handle. Such oppositional language goes against the assumed Canadian culture of consensus and compromise" (p. 257). My own experience as a longtime public schoolteacher and social justice activist in Canada confirms these generalizations about many teachers.

The problematic framing of "training" a teaching profession has been viewed by its nature as a conservative pursuit naturally resistive to change (Britzman et al., 1997; Kincheloe, 1993). Kincheloe (1993) offers that "teacher education, both preservice and inservice, is saturated with cognitive experiences that encourage conservative, individualistic, competitive, and decontextualized tendencies in the thinking of teachers. Prospective teachers encounter few experiences that challenge the status quo in schools" (p. 14). Although an inherent conservatism may inhibit progressive initiatives, educators must take responsibility to seize those opportunities that inevitably arise and strive to create more such spaces for the critical engagement of preservice teachers on issues related to ethnocultural pluralism.

Countering Student Resistance to Reform

Teacher education programs often attract students who may not wish to disrupt current situations in schools and who may not value professors who try to do so. Although progressive teacher educators may be comfortable with their socially transformative agendas, their students are less likely to wish to disrupt the status quo. Kincheloe (1993) writes, perhaps somewhat sweepingly, that "teacher education students tend not to be seekers of alternative ways of seeing; they often are not especially interested in finding new lenses through which to conceptualize knowledge and pedagogy" (p. 14). It is true that many are probably attracted to the profession because they enjoyed their own schooling, and some will have conservative values. However, recent research in Canadian universities suggests that a more critical attitude in teacher candidates toward ethnocultural equity issues may be surfacing in faculties of education (Britzman et al., 1997; Housego & Badali, 1996; Stovel, 1996; Young & Buchanan, 1996). Young and Buchanan (1996) report that a majority of the preservice teachers responding to their survey at the University of Manitoba express support "for a version of multicultural education that calls for an inclusive curriculum and an inclusive teaching force" (p. 61) and a majority believe racism to be a major problem in Canadian schools. Respecting the potential for critical engagement with candidates will mean identifying and optimizing those fruitful pedagogical moments as they occur throughout the teacher education program. Creating and finding these critical spaces where emergent topical equity issues can be addressed and explored in a broader social context of teaching and learning is an ongoing goal for faculty committed to these issues.

Building on Preservice Teachers' Knowledge: Rethinking Education

Preservice teachers are the primary target audience of progressive educational reform, so programs must address their various needs, perceived values, beliefs, and knowledge bases. A transformative approach begins with preservice teachers exploring and better understanding their own social identities (Britzman et al., 1997; Solomon, 1997; Young & Buchanan, 1996). This self-conscious exploration of a personal knowledge base as a starting point need not be threatening or reductionist in its implementation. Instead, it is an early step in preservice teachers' growing awareness of, and openness to, the diverse and multitudinous ways of making sense of the world.

To this end Britzman et al. (1997) recommend modifications to the teacher education program at York University toward engaging faculty and students alike in rethinking the nature and purpose of education. For preservice candidates this means focusing on how they "think about and speak to the relation between education and inequality" (p. 17) and actively engaging in ongoing debates around the structure and outcomes of their own educational experiences. Rather than seeking the correct "solutions" to classroom problems, teacher education candidates are encouraged to view their university and teaching experiences as a means of engaging creatively and collaboratively with others toward negotiating meanings and their own roles in larger social systems.

Teacher educators with a transformative agenda must address the fears and hesitancy of some preservice teachers. Flexibility is a crucial element for success, as Jordan (1995) reports on a program she helped plan and implement. She concludes that teacher educators must “attend to students’ developmental levels, entry beliefs, fears, and concerns. Most important, they must adapt instructional methodology and program objectives as often as it becomes necessary in an effort to continue the process of professional growth and development for themselves and their students” (p. 374). These efforts require a sustained level of energy and commitment, yet offer tremendous rewards for those whose goal is to nurture socially responsible, culturally sensitive, and equity-conscious teachers.

Preservice teachers must struggle to make sense of a wealth of challenging and provocative new ideas. Understandably their reluctance to embrace education responsive to ethnocultural diversity can include a complex and often contradictory set of reactions. In her case studies of three elementary education students, McCall (1995) explores their diverse and fluctuating reactions to multicultural education principles. Teacher candidates often have valid concerns about their own abilities and backgrounds and about the responses of their students, their students’ families, other teachers, and administrators to progressive approaches to teaching. She argues that teacher educators need to understand and address directly preservice teachers’ specific reasons for resistance to such pedagogy.

Reforms to teacher education programs could include improving preservice teachers’ knowledge of what constitutes best practice in schools. This may be accomplished by locating and providing more actual examples of teachers of multicultural and antiracist pedagogy in a variety of school contexts from local, provincial, and national sources. For example, there are a relatively small number of documented school-based programs in Canadian public schools that could serve as a useful starting point (Berlin & Alladin, 1996; Cogan & Ramsankar, 1994; Lund, 1993, Smith & Young, 1996). Academic journals, professional publications, and contacts across schools are potential sources for examples of efficacious models of ethnocultural diversity programming. In this way a link is forged between teacher candidates’ academic preparation and their engagement in effective social action in diverse school settings.

Ameliorating Faculty Resistance to Reform

Some professors may resist addressing diversity and equity issues because of perceived career risks to those who embrace its transformative tenets in opposition to the views of more conservative students and institutional structures. Teacher educators can expect some students to perceive their efforts toward any such reforms as an affront to tradition or standards. Greenman and Kimmel (1995) offer an illustrative instance of the inhibiting effect this can have on faculty: “Through negative evaluation, students often punish professors and facilitators who confront issues, take risks, and create discomfort. In many institutions, these evaluations are used as the sole means of teacher assessment” (p. 367). Similarly, classroom teachers commonly feel “apprehension about confronting the tensions inherent in a dialogue about antiracist education” (Solomon & Levine-Rasky, 1996, p. 30). The resultant lack of will on the

part of understandably cautious educators can work against an institution's equity initiatives. Developing a strong theoretical framework on learning and engaging a large portion of faculty are crucial early steps to overcome this.

Convincing faculty of the value of addressing ethnocultural equity issues means having empathy for the diversity of educators' starting points. Obviously this is a formidable task, as any faculty member's knowledge comprises deeply held personal and professional beliefs about learners and learning and about what it means to educate someone. Existing attitudes and behaviors must be viewed as a foundation for any new knowledge in order to bring about gradual, incremental changes in the daily practice of all faculty in a program. This makes common pedagogical sense and fits with constructivist models; teachers understand that the best learning occurs when they begin with what students already understand, building on and challenging that initial knowledge base as they encourage lifelong learning. It is reasonable, then, as an approach to modify teachers' practice at any level. Attending to the needs of the learners—in this case, the faculty—means also providing an ongoing "opportunity for many and consistent discussions about the goals and philosophy that will undergird the curriculum, and the freedom to restructure the delivery system in ways that are congruent with the goals and defined curriculum" (Shade, 1995, p. 380). A greater sense of ownership and common goals is the most likely result of a cooperative and developmental approach to change.

One goal of educational reform along these lines is to have individuals internalize the intrinsic value of addressing ethnocultural diversity and equity issues. As Nimrod and Emberg (1995) discovered during a major project across six Canadian community colleges, an effective means of achieving success involves a systemwide commitment to reform at several levels. In particular, attention must be paid to needs assessment, professional development for equity leaders, a variety of inservices and workshops, policy changes, and ongoing administrative support. Attending to equity need not entail professors discarding what they already understand about schools and preservice teachers, or about their own subject area specialties; rather, they add to that base. Preservice teachers are sent a clear and consistent message from all faculty, not just those identified as multicultural or antiracism specialists.

Addressing Hiring and Admissions Inequities

Addressing inequitable hiring practices and the resultant lack of diversity among faculty and staff is essential for opening teacher education programs to input from diverse perspectives (Lundy & Lawrence, 1995; Sleeter, 1993, 1996; Solomon, 1997; Stovel, 1996; Zeichner & Hoeft, 1995). Professors from ethnic minorities, for example, can be role models for students who have never seen themselves represented in the institutions in which they study. Their personal experiences with racism and with finding success can inform both mainstream preservice teachers and students from marginalized groups. A more representational faculty also sends a symbolic message that those behind the program practice the inclusiveness they advocate. Addressing cultural and racialized equity issues in personnel matters entails taking many different steps toward long-term transformation, beginning with policy changes and

modifications of hiring policies and practices—some reforms implemented immediately, and others incrementally over several years.

A related important issue that has received little attention in the Canadian context is the recruitment procedures used to attract certain students to the profession. Lundy and Lawrence (1995) analyzed demographic data from the applications and admissions records of applicants to 10 Ontario university teacher education programs, encountering challenges of missing or incompatible statistical data and changing terminology on ethnicity. Not surprisingly, they confirmed that more teacher candidates from “visible minority” and First Nations backgrounds are needed to reflect the diversity of the population served by public schools. Further, based on interviews with preservice teachers from these groups, Lundy and Lawrence offer several recommendations for attracting and maintaining candidates; these include carefully implemented affirmative action for attracting and accepting applicants, increasing the intake numbers, establishing large cohort groupings, and implementing curricular and instructional modifications. Clearly faculty hiring and inservicing, admissions policies and practices, and other core elements of a teacher education program must be evaluated and modified immediately and decisively if more equitable forms of teacher education and public schooling are to continue to take shape in Canada.

Framing Preservice Teachers as Researchers

Some scholars call for a deliberate overlapping of the roles of teacher and researcher in teacher education programs, with preservice teachers incorporating forms of field-based research into their early practica (Britzman et al., 1997; Clarke, 1995; Ladson-Billings, 1995). Teacher candidates and their supervisors benefit from this linking of practice and research. Ladson-Billings (1995) believes this may help bridge the theory-practice gap in education, as “this willingness to listen and learn from practitioners is providing researchers and teacher educators with opportunities to build a knowledge base in conjunction and collaboration with teachers” (p. 755). With the guidance of faculty members, preservice teachers may learn to view their teaching experiences in new ways while gaining insights into multiple perspectives on ethnocultural diversity and equity issues in their own practice.

Benefits of building in collaborative research activities to teacher education are reaped by the preservice teachers, who engage in a rich conversation on their own thinking about the role of teachers, and perhaps of the complexity of understandings of students and other teachers in their school settings. This requires a different perspective of teacher education, according to Britzman et al. (1997), who envisage a program for York University “that supports active and engaged learning about oneself and one’s profession and one that respects the pedagogical power of persistent questioning because education is always lived as an argument” (p. 18). Engaging preservice teachers in examining assumptions underlying diversity and pluralism discourses in education can be extended by having them delve into contemporary local issues including specific school district policies, hiring practices, curriculum content, school traditions, and many other potentially rich sources of critical inquiry (Britzman et al., 1997; Solomon, 1997). Providing preservice teachers with more opportu-

nities to “roll up their sleeves” and engage in educational research themselves could offer a potentially rich avenue for personal and professional growth.

Shaping Innovative Practicum Experiences

Nontraditional formulations of field experiences for preservice teachers may also prove to be a rich source of learning. Britzman et al. (1997) propose placements outside of mainstream school settings as an opportunity “for the community to be understood as a site of identity for students and a site for extended teaching and learning” (p. 23). Community placements allow preservice teachers to interact with their students outside of formal school settings and, ideally, provide crucial “insight into advocacy, social change, and the institutions that serve the community” (p. 23). Several US researchers study and promote practicum placements in culturally diverse settings as a way of providing future teachers experiences with individuals and groups they may not have encountered during the course of their own education (Grant & Secada, 1990; Mahan & Rains, 1990; Noordhoff & Kleinfeld, 1993; Phuntsog, 1995; Sleeter, 1993, 1996). Through carefully structured and intensive immersion in a variety of community settings, practicum students become fully engaged in daily interactions with those whom they may regard as different from themselves. An ongoing support network and systematic debriefing can ensure increased benefits of such innovative, experientially based learning opportunities.

Fostering Professional Collaboration

An important finding in teacher education literature is that beginning teachers are more likely to find success and avoid early burnout when they establish connections with other professionals. This is of particular relevance to new teachers engaged in multicultural and antiracist education in their practicum and early career placements. In follow-up interviews with 38 students involved in an innovative teacher education program, Cabello and Eckmier (1995) found they stressed the importance of networks, a factor not included in their research questions three years earlier. What the early career teachers had valued most was “the opportunity to develop a support network among their peers and with university faculty.... [that] helped them from burning out at school ... [and served] as a source of support and professional enrichment” (p. 41). Programs encouraging this sense of connectedness with others in a similar position, and with supportive mentors, hold great potential benefit for beginning educators engaged in, and reflective on, innovative pedagogical practices.

Many educational researchers support the argument that successful teacher education programs must have built-in opportunities for collaboration. Cochran-Smith (1995) emphasizes the importance of preservice teachers discovering the value of collaboration with each other and with established professionals as well “in learning communities and networks where other teachers are struggling to understand and ultimately to improve the social relations of schools and classrooms” (p. 521). Collaborations can include partnering preservice teachers with each other, with interested faculty, and with members of the community who are also concerned with equity issues (Britzman et al., 1997; Richards, 1995; Solomon, 1997). Henley and Young (1989b) describe a broad view of collaborations on multiple levels:

Within faculties this will mean building informal and formal networks of staff and students with similar commitments towards multicultural education; outside faculties it will mean developing much stronger ties with schools and teachers, communities, parents, and children, ties that do not end with certification, but which extend throughout the career of a teacher. (p. 41)

A lifelong commitment to working with others to challenge inequitable structures and practices seems a worthwhile goal for any teacher education program.

Conclusion

It is naive to expect to transform school systems or teacher education programs overnight. No one imagines that systemwide changes will happen without confronting a multitude of organizational barriers and challenges posed by academic institutions. Even so, changes such as those outlined above, driven by a shared commitment to various forms of equity education, will inevitably help shape Canadian public schools and education faculties as exemplary learning environments toward a more egalitarian future. Rather than avoiding the many problems associated with educational reforms, responsible educators must address them directly and immediately, capitalizing on what Sheehan and Fullan (1995) see as “the preconditions for convergence” of policy and practice currently existing in teacher education. Their candid comments on educational reform can serve as a wake-up call to educators and researchers committed to ethnocultural equity who realize that

Change is difficult, research dollars are scarce, [and] work in schools and with teachers takes time.... However, to not attempt change is unacceptable. At issue is not only the viability of teacher education institutions but the long term health of our teachers and our schools. (p. 100)

Note

1. I appreciate the pressing need for a broader consideration of equity to encompass a variety of related concerns on lived experiences of discrimination, oppression, and injustice. The important theoretical work to be done will entail seeking to identify and understand the complex intersections of a number of categories of social identity and conflict, including cultural, ethnic, and racialized identities, gender, sexual orientation, class, and physical ability. A broad orientation toward social justice must also attend to individuals’ multiple and overlapping identities. I anticipate that my specific attention to antiracist and multicultural education, loosely grouped here as ethnocultural equity education, might be perceived to work against a larger political project of coalition-building across other differences, yet it seems a prudent delimitation here considering the sheer scope of the literature in each field of study.

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Understanding Racial/Ethnic Stereotyping in Schools: From Image to Discourse

This article describes a study that explored the process of racial/ethnic stereotyping in one secondary school. In doing so it endeavors to provide an understanding of the more subtle ways advantages and opportunities are unevenly distributed among students. The article first furnishes a brief overview of traditional approaches to the subject of stereotyping, isolating a number of common elements in them. While acknowledging that traditional stereotypical analyses have produced much of value, I also point to a number of weakness in them. I go on to suggest that those interested in challenging these harmful stereotypes would profit from abandoning an accuracy-based approach and adopting one that sees stereotypical images as forms of contested discourse. Next I describe the prominent stereotypical discourses that show up in the school. Finally I provide suggestions for educators that will help them and their students to circulate alternative discourses that work in the interests of those who are often placed at a disadvantage by stereotypical discourses.

Cet article décrit une étude qui examine le processus de stéréotypie raciale/ethnique dans une école secondaire et ce, dans le but de présenter les moyens subtils par lesquels les avantages et les possibilités sont distribués de façon inéquitable parmi les étudiants. L'article débute en présentant un bref survol des approches traditionnelles à l'étude de la stéréotypie tout en faisant ressortir quelques-uns des éléments qui leur sont communs. Alors que l'auteur reconnaît que les analyses traditionnelles de la stéréotypie ont fourni beaucoup d'information appréciable, il souligne certaines des faiblesses qui caractérisent celles-ci. Il suggère en plus que ceux qui voudraient combattre ces stéréotypes nuisibles tireraient profit de la substitution de leur approche basée sur l'exactitude pour une qui interprète les images stéréotypées comme une forme de discours contesté. Suit une description des discours stéréotypés qui dominent dans l'école à l'étude. Pour terminer, l'auteur offre des suggestions qui faciliteraient la tâche aux enseignants et aux étudiants qui voudraient faire connaître des discours alternatifs qui agissent dans l'intérêt de ceux à qui les discours stéréotypés portent souvent préjudice.

Despite mounting evidence to the contrary (Alladin, 1996; Dei, 1996a; Giroux, 1993; McCarthy & Crichlow, 1992; Troyna, 1993), many educators continue to deny that educational institutions are racist in nature (Lee, 1996; Ryan & Tucker, 1997). In making their case they may point out that their particular organization, most of the colleagues with whom they work, and they themselves do not fit such a profile. How can we account for this apparent contradiction? Although there are no doubt many reasons for these contrary points of view, one may well revolve around the different possible interpretations of the term *racism*. One view, for example, sees racism as a series of persistent practices that systematically and unjustly allocate advantages to certain groups and individuals, whereas proponents of another perspective believe that it is the product of the occasional actions of a few deviant individuals.

The latter view may just as likely be embedded in commissioned reports (Department of Education and Science, 1985; Scarman, 1981), academic treatises (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950; Allport, 1954) as in the beliefs and practices of those who teach young men and women (Dei, 1996b; Ryan, Wignall & Moore, 1995; Troyna, 1993). It often equates racism with racial prejudice. Those who subscribe to this view believe that racism (i.e., prejudice) manifests itself in the irrational and ignorant beliefs and actions of a “few rotten apples” (Henriques, 1984). These bad apples, then, are thought to be the source of negative attitudes that are subsequently acted out in intentional and malicious ways against particular groups and individuals. In this latter view, disadvantage associated with racism is not systemic. Because racism is largely an individual matter, proponents of this perspective believe that it surfaces in a serendipitous rather than systematic manner. A few racist educators, for example, may occasionally penalize students on the basis of the latter’s perceived racial/ethnic associations through their sometimes blatantly unfair treatment of them, depriving these particular students of opportunities that other students would normally enjoy.

The problem with this narrow conception of racism is that it cannot account for the systemic disadvantages that certain racial/ethnic groups of students experience in school. Indeed, xenophobic behavior represents just one aspect of the systematic and unfair distribution of advantages.¹ Although calculated and malicious acts of racial prejudice probably occur in schools more often than we would care to see or admit, they constitute only one (less common) way certain students may be placed at a disadvantage. Indeed most teachers are well-meaning human beings who have their students’ interests at heart (Nieto, 1992). Even though educators’ efforts may at times be misguided, it is hard to believe that more than a relative few would as a matter of course go out of their way to penalize particular students on the basis of their perceived heritage or skin color. It is more likely that it is the taken-for-granted beliefs and practices that teachers, administrators, and policy-makers hold and employ in their efforts to help students learn that inadvertently and systemically penalize some of these same students.

One important way these taken-for-granted beliefs and practices find systemic expression is through the creation and employment of stereotypes. In their efforts to cope with a perpetually evolving and changing world, educators and students often reach for popular and often unfounded images of groups and situations to help them understand, and act in, both familiar and unfamiliar circumstances (Boutte & McCormick, 1992; Dei, 1996a, 1996b; Elrich, 1994; Giroux, 1993; Lee, 1996; Ryan, 1996; Ryan et al., 1995; Solomon, 1992). These images can have a profound effect on educators. Among other things, they provide the basis for ways in which these people persistently see and interact with certain individuals and groups. Unfortunately, these interactions can work against the latter, seriously limiting their immediate and long-term opportunities. This article describes a study that explored the process of stereotyping in one school. I begin by developing a perspective on the process of stereotyping by reviewing approaches to the phenomenon, critiquing them, and settling on a notion of stereotypes as forms of competing discourse. Next I describe the research methods used in the study. This is followed by an account

of how various stereotypical representations show up and are contested in the school.

Stereotypes

The term *stereotype* has a relatively short history. First coined in the late 18th century to refer to the casting of multiple papier mâché copies of printing type from an original mold, it was based on the Greek words *stereos*, meaning form or solid, and *typos*, meaning the making of an impression (Miller, 1982). The concept of stereotype was first employed in social science by Lippmann (1922). Since then the concept has taken on a number of different forms (Henwood, Giles, Coupland, & Coupland, 1993; Mackie, 1973; Miller, 1982). Needless to say, academics do not all agree on its precise features. Even so, a number of elements, although not common to all views, remain prominent. These include stereotyping as a generic process of categorization that works through “good” and “bad” images, which in turn frequently misrepresent the groups they depict.

One key element in the various concepts of stereotypes is the idea that stereotyping is a process basic to all human beings. In this regard social scientists have used the term to refer to the images through which individuals categorize the world (Fishman, 1956; Gilman, 1985; Levine & Campbell, 1972; Lippmann, 1922). In this view a stereotype is a crude representation of the world. It is necessarily reductive, generalized by those who employ it as typical of that class of object for which it stands. The process of establishing and employing stereotypes, or generalizations in this view, constitutes a vital part of strategies that men, women and children employ to get on with their lives in a world where they have only a limited knowledge of their surroundings. We are forced to rely on what Schutz (1967) refers to as “typifications,” which emerge from memories of our past experiences, to estimate what we can expect from the situations that we perpetually encounter in our day-to-day lives. We reach for these typifications as we adjust our behavior to suit situations that resemble to a greater or lesser extent situations that we have either previously encountered or at least know something about (Ryan, 1996).

Social scientists have also associated stereotypes with good and bad images. Gilman (1985), for example, associates the creation of these images with individual and group efforts to combat anxieties that arise with a perceived loss of control. He traces the roots of the distinction between “good” and “bad” to the process by which all human beings become individuals. It occurs first as the infant becomes aware that there are things in its immediate environment that are not part of the self. As the child is able to distinguish more and more between the world and self, it senses that it is not able to control certain aspects of its universe. When children develop into adolescents and eventually adults, they learn to minimize the anxiety associated with this lack of control by projecting “badness” onto what they cannot control.

However, most social scientists, including Gilman (1985), maintain that stereotyping is not exclusively a psychological or personal phenomenon. Rather, they see it as also a social process (Henwood et al., 1993; Merelman, 1995; Shohat & Stam, 1994; Wilson & Gutierrez, 1995). This means that we select stereotypical models from the social world in which we live. Indeed every

social group has a vocabulary of images for the externalized other. A product of history and of a culture that perpetuates them, these frequently rich webs of signs and references for difference reflect the particular contexts that give rise to them. They are also intimately associated with a society's communal sense of control over its world. These models are the medium through which the tension between control and its loss within individuals and groups, and the subsequent anxiety it produces, finds expression in the forms of the other.

Pathologizing the other through negative analogies is one way the self can protect itself from its own contradictions and from perceived threats from without. Searching for and degrading differences in skin color and physiognomy, for example, is a common way of responding to perceived threats to individual and group autonomy. It is not surprising, then, that the qualities assigned to the other generate patterns that may or may not have any relationship to any other reality. In fact many social scientists (Allport, 1954; Fishman, 1956; Mackie, 1973; Miller, 1982) either explicitly state or imply in their work that the stereotypical image characteristically does not accurately represent the group to which it refers. Although some maintain that there may well be a "kernel of truth" in such images, most concede that they are generally misleading, more often than not in a negative way. As a corrective to these mistaken images and the first step to generating more positive (and accurate) representations, some social scientists recommend more research into relationships between these images and the groups that they depict (Mackie, 1973).

In this view, then, stereotypes provide an essential, if not always benevolent, tool for helping us get on in our daily lives. In assisting us adjust our behavior to suit the particular circumstances in which we may find ourselves, these crude and often misleading representations serve to reduce the anxiety we may feel over the perceived loss of control that we routinely experience. At the same time, however, they are part of patterns of relationships that systematically and unfairly distribute advantages among and between certain groups and individuals.

Stereotypical Images as Discourse

Over the years those who have exposed and analyzed stereotypes, like a number of those social scientists cited above, have provided us with a valuable service. According to Shohat and Stam (1994) they have, for example, played a role in (a) revealing oppressive patterns of prejudice that at first glance may have appeared random or inconsequential, (b) highlighting the psychic devastation of negative portrayals of individuals and groups, and (c) signaling the function of stereotypes as a form of social control. In doing so they have drawn attention to some of the more subtle ways racism extends its reach and unjustly penalizes certain individuals and groups. Some of these approaches, however, have their limitations. In particular those analyses that revolve around a preoccupation with accuracy and a good-versus-bad image approach exhibit a number of theoretical-political pitfalls.

Shohat and Stam (1994) contend that an exclusive preoccupation with positive and negative images leads to a kind of essentialism. They maintain that those who adopt this approach assume, often implicitly, that the group being portrayed has a real essence and that this invariably benevolent nature is being

represented in unflattering and inaccurate ways. In their efforts to expose the significance of these frequently misleading images, these approaches tend to reduce complex varieties of portrayals to a limited set of reified and ultimately oversimplified categories. Media analysts, for example, may force diverse fictive characters into preestablished classification schemes. For these people, there is a "pickaninny" behind every Black child performer, a "mammy" behind every nurturing Black female. Static analyses of this sort do not allow for mutations, often ignoring the historical instability of stereotypes and the language that accompanies them. They fail to register, for example, the ways imagery might be shaped by changes in the economy.

A number of these approaches also subscribe to a one-to-one correspondence idea of truth. Unfortunately, this view displays a number of weaknesses. First and foremost, by presuming that properly assembled images can capture groups and individuals as they really are, they misread how individuals and groups are formed. Among other things, proponents of these approaches may believe erroneously that such projected images are merely tools for representing what for all intents and purposes are distinct and self-contained objects (e.g., groups, individuals). They fail to realize that there is always an important relationship between these portrayals and the groups and individuals that they depict. For example, the social position of a particular group will generally dictate how that group is generally portrayed, and these images will in turn have a decisive impact on the group in terms of, for example, how they see themselves and how others see them.

Proponents of traditional stereotype analyses also fail to see how representation is in fact a political process. They often do not recognize how these arenas of representation become in important ways sites of contestation. It is here that groups struggle over how they are to be represented, the outcome of which both reflects and dictates the fortunes of the respective groups. Given the contested nature of processes of representation, it makes more sense, then, to abandon the language of accuracy and authenticity and focus instead on discourses and how they work through the images we encounter. In this view, visual images or texts do not display inherent or fixed meanings. Instead, meaning emerges in the dialogue between the viewer and the image as the viewer attempts to make sense of what he or she sees. This sense can only occur, however, if and when viewers place their experience into discourse, that is, into available patterns of words, symbols, and images. Discourse, however, should not be equated with language. In fact it is a concept that attempts to combine language and practice, what people do and what they say (Hall, 1997). This means that the sense people make of their experience depends in crucial ways on who is doing the interpreting; what kind of experiences the interpreters bring to the event; the availability of words, images, and practices for making sense; and the social or institutional context in which the interpreters find themselves (Fiske, 1996). It is also important to acknowledge in this regard that discourse is both a noun, like language, and an activity, that is, a social practice (Fiske, 1996). As a consequence, not only should those interested in exploring stereotypes from this perspective probe the repertoire of already existing signs and symbols, but they need also be concerned with the continuous process in which sense is made of these symbols and subsequently

circulated. Discourses offer men and women “interpretive packages,” a series of central yet perpetually evolving organizing ideas or frames, which become part of how they make sense of what they encounter (Merelman, 1995).

Discourses are not merely media for making sense. They are, as mentioned above, also the means through which power is exercised to promote particular interests. What discourses are made available or prevail at a given time and place will inevitably depend in crucial ways on prevailing power arrangements. These discourses or sense-making frames exert their power in part by filtering how our experience makes sense to us. In this view experience itself does not determine its own sense. Rather, the social power associated with the discursive processes dictates how the events associated with experience are placed into particular discourses, providing them with one set of meanings as opposed to others. These sets inevitably favor certain interests at the expense of others. Indeed they play a vital role in filtering the voices that eventually emerge in these discourses. Thus television can offer viewers various interpretive packages for understanding nuclear power, for example, that advance particular interests. Putting a “progress” spin on this topic provides space for certain voices and interests to be articulated at the expense of others (Merelman, 1995).

As emphasized above, discourse need not be seen as solely a technique of inequality, but also as a terrain of struggle. Fiske (1996) prefers to see discourse not merely as a tool for advancing certain interests, but also as a field of struggle in which various groups strive to have their voices heard and their discourse events placed into the politics of everyday life. In other words, discourse is not just a technology for repressing, marginalizing, and invalidating other voices and discourses. It is also the medium in which the latter are contested. Such contests often revolve around, for example: (a) struggles to accent a word to turn the way it is spoken or used to advance certain interests; (b) struggles over the choice of certain words or images; (c) struggles to recover repressed words or images; (d) struggles to disarticulate or articulate; and (e) struggles to gain access to public discourse or media to have one’s voice heard (Fiske, 1996). Struggles over how groups are to represent themselves and others occur generally wherever cultural issues are at stake (Merelman, 1995). They take place routinely in art galleries, recording studios, television meetings, movie studios, newsrooms, local and national legislatures, courtrooms, school board meetings, and of course in the halls and classrooms of schools themselves.

In sum, the construction, use, and effects of stereotypes are perhaps best understood not in terms of more or less static, self-contained, and misleading images, but through the latter’s insertion into historically rooted sense-making practices, that is, discourses. Among other things, associating stereotypes with discourses allows us to acknowledge and explore the perpetual and frequently unequal struggle over how groups are portrayed. As forms of discourse, these portrayals constitute at the same time artifacts and social practices, techniques for repression, and, perhaps most important, the terrain where struggles over representation occur. It is here that individual and group anxieties over control find expression, where various interests vie for supremacy, where some voices

are heard and others muffled, and where advantages and opportunities are distributed and eventually acted on.

This study explores how individuals in one school setting make sense of different others and how they use this sense in their interactions with these others. It looks at how the prevailing stereotypical discourses are reflected in the ways people talk about these different others and in how they act toward them.

Methods

This study is based on research conducted in one suburban school, which I call Suburbia Secondary School. The school itself is diverse and is located in an equally diverse large urban center (for a similar account of these methods, see Ryan, 1996). The school community itself is also diverse, both in terms of the financial well-being of the residents and of their heritage. Many of the students who attend this school come from families that are well off financially. Many families, however, are also struggling to make ends meet. The larger metropolitan area in which Suburbia is located has over the past 20 years become much more visibly diverse with the change in immigration patterns. Most of these immigrants no longer emigrate from western Europe as they once did. Instead many new residents come from such places as Hong Kong, Poland, China, India, the Philippines, Lebanon, El Salvador, Sri Lanka, Vietnam, and Guyana to take up residence in Canada (Statistics Canada, 1993). Many immigrants find this urban area a particularly attractive place to settle. As late as 1991 they constituted 38% of its population (Statistics Canada, 1993).

Suburbia Secondary School reflects this growing diversity. A recent school-administered survey confirmed this. It indicated that students identified with over 60 different heritages. The largest groups of students included students of Italian (18%), Filipino (14.7%), Portuguese (9.5%), Chinese (8%), and Polish (6.3%) heritage. At the time of this study the school was barely four years old; its student population topped 1,700. Student numbers had grown considerably since its first year, and as a consequence the school had to add a number of portable classrooms. The teaching staff is also young, and many of them were hand-picked by the principal. Almost all, however, are of European heritage.

The study was initially conceived to explore how teachers, students, and parents were responding to student diversity in this particular school. During the course of this study I worked with three other people: a research officer and two graduate students. We divided the data collection tasks among us and met regularly to talk about emerging themes and future strategies. First we observed the teaching practices of four teachers selected on the basis of their variation in teaching experience, subject expertise, and gender, and spent two days observing in their respective classrooms. In addition, we talked to them about their teaching practices and selected incidents that occurred during the course of the observations. We also interviewed a number of other teachers, guidance counselors, and administrators. In all we talked to 25 staff members. We also talked to the only two teachers who were not of Caucasian background, although we did not observe their teaching practices.

We also observed and talked to students. Like the teachers, these students were selected to represent as much variation as possible. Initially we looked for

student candidates in the classes we observed and eventually decided on their suitability after comparing notes. First we shadowed them for two entire days. We also talked to them about their school experiences. These were not the only students to participate in the study, however. We also conducted student focus groups and talked individually to students who we felt might provide us with unique insights. In one instance we sought out and interviewed a student who we believed reacted in a particularly constructive way to an ugly racist incident. In all 40 students participated in the study. Finally, we talked to a group of parents. Initially we tried to talk to the parents of the six students whom we shadowed, and when this was not possible in all cases, we chose replacements with similar backgrounds.

In the initial stages of the study we met regularly to compare notes and, among other things, to pick out promising themes to pursue. One of the most prevalent of these proved to be stereotyping, which emerged early in the study as we had our initial conversations with students. These students drew our attention to the tendency of both teachers and fellow students to hold and act on stereotypical beliefs about different others. We decided at this early stage to pursue this phenomenon and subsequently looked for it in our observations in classrooms, hallways, and the cafeteria, and we asked pointed questions about it when we talked to teachers, students, and parents. Eventually, after all the data were collected, I isolated all descriptions and/or opinions regarding stereotyping and organized them for systematic presentation. What follows is a summary of this.

Recognizing Difference

The process of making sense of differences first entails that those making sense notice certain things about their environment that they identify or notice as “different.” The first thing that most teachers, students, and parents point to as being different are others in Suburbia’s school community. They consistently speak about the wide variety of differences that characterize the student population. Most refer to the myriad religions, languages, skin colors, heritages, home countries, interactional preferences, values, and so on associated with these students as *cultural differences*. Most of these mostly Anglo teachers have these cultural differences at the forefront of their thoughts, because only in recent years have they encountered so many children with cultural proclivities that may affect how they interact and learn in the classroom. Susan, for example, says with respect to the students population, “There’s plenty of diversity, that’s for sure.”

One consequence of this high level of diversity is that many teachers know little about many of their students. Frequently they misidentify them. Margaret, for example, says with reference to the students, “They’re not just Chinese or whatever. They’re Indian. I’ll see their last name and I won’t be able to tell what it is. Portuguese or Pakistani or whatever.” Students are conscious not only of teachers’, but also fellow students’ inability to identify them correctly. For example, Juanita, who is from South America, points out that she has been mistakenly identified at one time or another as someone from Asia, China, Portugal, Italy, or the Philippines. Unless the student’s heritage is obvious, many teachers and students will not know the ethnic origin of many

students. This is particularly true in the case of Latin Americans, some eastern Europeans, and the wide range of Asian students. Identifying a student's heritage, however, may not always mean much for those interested in understanding their students, because there can be such a wide variation in even those groups perceived to be homogeneous in make-up. Erroneous assumptions of homogeneity or mistaken identifications can upset students. Katherine, a student of African heritage, is annoyed when others assume that she is Jamaican. She says, "Once people think you're Black, they think you're Jamaican.... I don't know if that is a real basis of being upset, but it hurt[s] me."

One of the consequences of this high level of diversity is that many members of this school community are often forced to rely on sources other than direct personal experience to make sense of whom they see as different others. Norman, for example, who was born in eastern Europe, maintains that many of the people he knows who emigrated from this area rely on movies for their knowledge of certain groups of people. He says, "A lot of the stereotypes are from movies 'cos they see the movies but they [people from his home country] don't see the [people] that get stereotyped." But even when direct experience plays a role in shaping understandings of groups and individuals, it generally is inserted into the dominant sense-making frames that circulate in and around the wider social milieu. In what forms, then, do these discourses show up in the school?

Dominant Stereotypical Discourses

Educators and students make sense of what they see as distinct groups in many ways. Some of these patterns, however, take precedent over others. They find expression in how students and teachers talk about others and in how they deal with them. Some of these discourses include the ideas that Croatians have a lot to say about themselves and their country; they are all nationalistic and sexist; Filipino kids seldom talk about their culture and thus are not necessarily proud of it; Polish kids are quiet and reserved; and Portuguese students are not troublemakers. Although these discourses circulate freely, others have a greater impact on how teachers and students perceive and react to certain groups. By this I mean that in conversations with teachers and students they emerged much more frequently than the above understandings. These include supposed physical and intellectual abilities of students of African and Oriental heritage.

The first and most powerful is the idea that students of African heritage, particularly males, possess unique physical abilities and will not hesitate to employ them when they see fit. Many students and teachers make sense of the talk and actions of these students by believing that these social practices are merely reflectors of their inherently violent natures. Teachers and students react in one of two ways. The first is to respond in an overly aggressive manner, although generally only a few teachers adopt this path. Riley is one of these teachers. He says:

There's generally a segment of the Black students that I stereotype and they bring that on themselves. I'm very open in the beginning and they bring that upon themselves, where they have a major chip on their shoulder and everything that's done to them is done in discrimination. And that kind of student I treat

differently lots of times, and that is the student that I'll go out of my way to discipline.

A more common reaction among teachers, however, is to do quite the opposite. Most teachers will go out of their way to avoid students of African heritage, particularly in the halls of the school, because many of them are intimidated by these young people. Gilby, a teacher, says, "A lot of teachers are afraid to deal with certain groups of students ... Teachers ... won't walk through the main office or the main hallway in the morning." Paul, another teacher, gives his view.

The Black kids, they are effusive, as people, you know they are very verbal. They have got lots to communicate about, they dance around the place. They are very active, dancing is interesting, like they will stand in the forum downstairs, and they will dance, and this intimidates people, this intimidates some people. Like teachers, some teachers will come along and say, "Can you get out of here please? I don't want you doing that." You know if you are dancing, or you have your voice raised, or you are doing, you know or you bang the dominoes down hard in the cafe, that intimidates lot of teachers, because to them it means no discipline. It means that they are likely to do anything at any time. It intimidates a lot of teachers.

Marabel is one of those teachers who do not like to be placed in a potentially confrontational situation with male students of African heritage. She is clearly intimidated not only by their manner, but also by their apparent size. She says,

There's some people, some Africans that sit in the northwest corner [of the cafeteria] and they always have on—you know, they're not allowed to wear jackets and hats but always have them on. So I always have to go over and tell them to take it off. And they're big, too, I guess that's the thing. It's not even that they're African, it's that they're big whereas the little Chinese and Filipinos are so small: It's no big deal to say, "Put your sweater on," whereas these guys are big and I just find that they're always, that they don't want to pay attention.

Teachers are not the only ones intimidated by African students. Some students are also afraid of them. Roger, for example, maintains that "If anyone's afraid of a group, it is probably the Blacks 'cause they see them as the loudest and most rebellious."

Associated with this discourse is a belief that there is a relationship between African heritage and sporting prowess. A number of people to whom we talked either believed that Blacks were all naturally good at sports or cited incidents that illustrated such a belief. Frances, an African girl admits that she tires of people who ask her about this apparent connection. She recalls one such incident.

I went to a school track meet with my friend and there just happened to be a lot of Black people on the team. They all had to try out. And this White girl asked me, "How come Black people are so good at sports?" I said, "I don't know" ... I passed it on to somebody else to answer.

African students may actually be the subject of recruiting efforts. Jason, an African male, contends that certain staff wanted him to play football because they believed he had the natural skills to play the game. He says

When I first came here—you know, you come to school to do what you have to do—I didn't want to join up for any sports. But for three months I kept being harassed by the teachers, and the teachers kept on saying, "Oh yeah, you know, you're Black, you can play sports; you know, what's wrong with you?" ... Like they do what they have to do to get you on the team if you're a good sportsman. But I didn't want to play any sports and they just kept harassing me. Then finally they got the hint.

Although many in the school community have much to say about African students' physical attributes, they have much less to say about what they believe to be their intellectual capabilities. Although teachers do not come right out and explicitly say that African students as a group are less able academically than other groups, this belief is implied in much of their talk. For example, they never allude to them when citing gifted groups, but may single out individuals as if they are an exception to the rule. Students, however, do not hesitate to draw attention to the unfair treatment they believe they receive from teachers who hold these beliefs about their academic ability. They consistently refer to the consequences of these unduly low expectations. Ilda, a young woman of African heritage says, for example,

At the beginning of the semester, in school, when they hand out papers or anything ... to the rest of the people in the class, like tests, they sort of look at [others] like "You're going to do well," but when they hand it to me it's like: "Oh God, why bother?" And then when they see the marks they're like surprised. And they start questioning people around you, like, "Were you hiding your paper?" and then they make a big fuss about it. "Now, you have to cover your paper to make sure nobody is cheating off of you." Just because of that. Then, "Why did you cheat?"

Students find these expectations may place undue hardships on them, particularly if they are determined to do well in school. Maria, for example, believes that she has to exert considerably more effort than most students to overcome some of these barriers. She says, "You have to work twice as hard as every other kid in your class to [do well]. It shouldn't be that way."

On the other hand, both teachers and students believe that Asian and Chinese students are the most gifted intellectually. Jillian, a teacher, believes that Oriental students are superior, and she looks forward to their presence in her classroom. She says,

The Chinese, the Japanese they all sit together and they're at the front. They're very bright, very bright. Brilliant. Which is wonderful. And then there is another boy that sits in the front, Ivan, who is right in the front too. And Theresa, and it is kind of neat how they all come to the front and do such hard work as they really are. So in that sense it is sort of, you can't label them but you know that. When I saw my class list I said, "Holy cow." I saw all the Chans and they are such hard workers that they set a good example for everybody.

It is not only teachers who believe that Oriental students are gifted intellectually. Students are also apt to believe this and may also believe that it leads to differential treatment. Billy, for example, says:

If anyone thinks that a group is the smartest, it's the East Asians or the Orientals, because they've come from the Asian countries. So they're smarter. So they might see the whole group as being smarter.... If a teacher will get a paper from, say, a

White student or a Black student and then get a paper from an Oriental student, and supposing it was a class regarding math or anything like that, they might be exactly the same, but they might generally favor, there might be a bias in the teacher's mind that the Oriental might be better.

Not all Chinese students may agree with such a generalization. One young Chinese woman, for example, worries that because she is not able to speak English very well teachers will think she cannot excel at math, which she believes she can. Teachers as well notice that some of these students struggle with some of their subjects, and others note that high expectations unduly penalize some of these students.

Not all members of Suburbia's community make sense of African and Asian students in these stereotypical ways. But because so many base their practice on these understandings, their actions marginalize discourses that represent these groups in other ways. In particular these views often override how members of these targeted groups see or make sense of themselves, as is evident in the above portrayals. William, a student of African heritage, addresses this matter head on. He is frustrated with how teachers and authority figures respond to him and his friends. He recognizes that others are "scared" of them but believes they feel this way because they do not "know how Black people act." He says that his and his friends' understanding of themselves does not get a reasonable hearing among other (more powerful) groups. Other groups have different perceptions of his group, and these perceptions generally dominate in interaction. To be sure this prevailing portrayal of these young people as threatening does not acknowledge meaningfully the views of the people being depicted. Unfortunately for William and many others whose voices are not acknowledged in the dominant discourses, these sense-making practices often place them at a disadvantage, depriving them of many opportunities that other students may have.

Discussion

As I indicate above, one useful way of understanding how young men and women of certain ethnic/racial backgrounds are systematically placed at a disadvantage in schools is through the practice of stereotyping. Unfortunately, traditional ways of conceptualizing stereotypes as mistaken images, although useful in helping us understand how racism works, have their limits. Seeing stereotypes as forms of discourse, on the other hand, allows those interested in resisting racist practice in schools to get around the mistaken essentialist assumptions of the former approach by viewing them as contested sense-making practices. For those who adopt this view the issue is not necessarily correcting mistaken images and beliefs, but rather finding ways to allow less recognized sense-making practices to emerge and circulate as equal forms of discourse. Such a task, however, brings many challenges.

Some reasons for these challenges are evident at Suburbia Secondary School. Many in this school community look to certain prevailing discourses to help them make sense of the multitude of often unfamiliar differences they encounter on a daily basis. Among many such discourses a few stand out. The most prominent of these concern the physical and intellectual capacities of students of African heritage. Many teachers and students attribute many of

their words and actions to the former's supposed inherent physical tendencies. They believe, for example, that many students of African heritage are inherently violent and have a natural ability to perform well in some sports. On the other hand, many teachers and students also believe that these same students are less able in academic matters than most other students, particularly Asian students whom they see as the most proficient in these matters.

These sense-making patterns, however, are not uniformly adopted or accepted by all in this school community. Suburbia is striking in that in some situations those to whom many of the prevailing discourses are directed do not understand themselves as specified by these discourses. Indeed, as illustrated, William maintains that he and his friends understand themselves in different ways than do others who adopt the prevailing understandings. That the understandings of most teachers and other students prevail is not the result of more accurate perceptions, but of struggles between and among these and other competing views. In the school setting, teachers who are more powerfully positioned and students who are numerically superior to students of African heritage are able to find ways to make their sense circulate more pervasively, and as a consequence count more than those of the former. The result is that this process does not always work in favor of these students. As illustrated above, teachers and students act on the basis of these perceptions, often in ways that unfairly punish the former.

The implications of using a discourse framework for understanding and eliminating more subtle forms of racism like stereotyping are fairly straightforward. First we need to understand that even though a stereotype may not coincide with some people's experience or present uniformly positive portraits of a particular group, it does not mean that educators should pull out all the stops to produce accurate and naturally virtuous images. Doing so threatens to gloss over the vital differences between group members, ignores the changing nature of groups themselves, and inevitably stretches the credibility of those engaged in this process to the breaking point. Attempting to circulate an image of William and all males of African heritage at Suburbia that is uniformly virtuous will accomplish little. Moreover, those bent on producing what they believe to be accurate images that are also universally positive will soon realize the futility of such an enterprise. Instead, educators need to realize that how William and his friends seem to others will depend on the sense that the latter attribute to their actions. Given that these actions can be interpreted in any number of ways, then, they need to find ways to ensure that alternate schemes for making sense are given space to circulate. These discourses need not be exclusively positive or bring with them claims of authenticity or accuracy, but they do need to work for rather than against those not well served by prevailing discourses. Educators will best serve students like William if and when they are in a position to examine their own taken-for-granted understandings critically, help others to do the same, and work with them to resist and replace oppressive discourses.

Perhaps the biggest challenge for those who wish to ensure greater opportunities for chronically marginalized discourses to emerge is the reality that discourses and the struggles associated with them inevitably transcend individual school settings. Indeed in the case at hand the outcomes of the some-

times one-sided struggles between and among sense-making patterns and those who employ them are not decided exclusively on the basis of the interactions that take place within the walls of this institution. The sense that William and his friends make of themselves and others does not take precedence in the school because the associated discourses that they use to make this sense have not fared as well as other competing discourses in struggles that go beyond this particular school. Evidence of the outcomes of such struggle are evident not only in other schools, but in many other institutions. For example, scholars have noted similar attitudes toward those of African and Asian heritage in schools (Dei, 1995; Lee, 1996; Solomon, 1992) and in Western culture generally (Fiske, 1996; Merelman, 1995; Shohat & Stam, 1994; Wilson & Gutierrez, 1995). As a consequence, introducing conditions in individual schools that allow previously less prominent sense-making schemes to compete on a more level playing field, although important, will in the end probably fall short of their goal if they do not in some way address the wider constellation of competing discourses.

There are many options for addressing both local and wider manifestations of discourse. One approach is to interrogate media that circulate forms of discourse over a range of settings and institutions and to use these understandings to critique and change both global and local understandings and practices. Two such modes of communication include the media themselves and curricular materials. A good place to start this process is to help members of the school community address the media. Indeed the power of the media in contemporary life and in schools is pervasive (Morgan, 1995), a fact not lost on one of the students above who blames the media for the stereotypical attitudes of many of the people from his home country. Contests of power won and lost have generated dominant media discourses that regularly depict people of African heritage as inherently violent and intellectually inferior and Asians as "model minorities." News programming (Fiske, 1996; Wilson & Gutierrez, 1995), cinema (Shohat & Stam, 1994), other television programming (Merelman, 1995) including "reality-based" police shows (Andersen, 1995), and the print media (Lee, 1996) have over the years regularly served up interpretive frameworks that invite audiences to make sense of African and Asian Americans and Canadians in ways that conform to the above views. The fact that these images dominate these media are the result of rather one-sided contests over what discourses will prevail in the respective media representations of contemporary life. Most media outlets are owned by White people of privilege who hire mostly Whites, who in turn generally give in to pressures that encourage them to approach their subject matter from angles defined in terms of the dominant cultural perspective (Wilson & Gutierrez, 1995). Unfortunately, opportunities for non-Whites to start up their own outlets appear even slimmer today as the media moguls attempt to cover all bases by spreading themselves over a variety of media forms. The advantage here goes to the larger (already White-owned) corporations that have the capital base to spread their investments across several technologies and to enter into alliances of convenience. Most non-White communities will find themselves priced out of these technological advances, able to participate in discursive struggles at only the most basic levels (Wilson & Gutierrez, 1995).

Those interested in providing greater opportunities for traditionally marginalized racial/ethnic groups would do well to assist students, educators, and other members of the school community understand how they and others are implicated in the circulation of mediated discourses, how they might resist these discourses, and how they might join with others to ensure that marginal discourses and voices have a chance to compete in the mainstream media. Among other things, this approach would take student experience seriously (Sholle & Denske, 1995) and provide people with skills to allow them to recognize and resist the often taken-for-granted dominant discourses embedded in media images. One way of doing this is through a *jujitsu* technique that uses alternative media productions such as *Babakiueria* to turn ordinary ways of looking at things on their head (Shohat & Stam, 1994). Developing individual decoding skills, however, constitutes only one step in a much larger strategy that would be geared toward helping marginal discourses and voices gain a more secure footing. Educators, students, and others in the school community also need to find ways to work together to exert pressure on media outlets and other corporate interests in ways that will encourage them to sponsor alternate voices in their communications.

Stereotypical discourses also circulate in curriculum materials. More often than not the product of profit-oriented conglomerates, they are generally widely circulated, assume a certain degree of authority, and regularly carry stereotypical discourses that encourage users to make sense of marginalized groups in unflattering ways (McDiarmard & Pratt, 1971; Sleeter & Grant, 1991; Walker, 1993; Whately, 1988). One strategy for eliminating stereotypical discourses from entering the classroom is simply to block certain curriculum materials. Not all agree that preventing materials from entering the classroom is the best strategy, however. Although Klein (1985) suggests criteria for identifying racist or inappropriate texts, she also believes that most energy should be directed toward readers and not reading materials. For one thing, the elimination of all books that contain elements of racism or bias is simply not realistic. It is seldom possible to replace all inappropriate books whether they are part of the curriculum or are available on the shelves the school library. Klein (1985) goes on to acknowledge that biased books can be used to good purpose. Simon (1992) also favors an approach that admits what some might consider inappropriate material into the classroom. He contends that the withdrawal of texts may not be the best way to contest stereotypical discourses. For Simon interrogating such texts in the classroom may be the better way to understand, contest, and overturn the more universal racist discourse and practices that regulate classroom readings.

First, teachers and students need to be able to recognize stereotypical discourses in curriculum materials. This is not always as easy as it sounds, particularly for teachers and students of the dominant culture who may take such things for granted. It is comparatively easy for them to overlook such discourses because they are frequently the benefactors of these ways of making sense, and as a consequence are not usually portrayed in unflattering or demeaning ways that would attract their attention. This is not always the case for those who belong to marginalized groups who are more often portrayed in unflattering ways in curriculum materials. It is, therefore, often easier for marginalized

people to recognize stereotypical and racist discourse. Because teachers and students have much to learn from students of marginalized groups, they would be wise to give them plenty of space to voice their opinions on these matters. In this regard Klein (1985) feels that teachers should encourage these young people to trust their own judgments in these matters. She cites the case of a 7-year-old Black girl who was able to identify at a glance what she knew from experience to be distorted or untrue in a text. Providing these sorts of opportunities is the first step in ensuring that alternative discourses surface and circulate in the classroom.

Once teachers and students make it possible for alternative discourses to emerge in the classroom, they must also find ways to circulate them beyond the classroom and school. One way is through student- or community-run newsletters or newspapers. In Nova Scotia, for example, students at Cole Harbour District High School, a school that has experienced conflict in the past, put together their own newspaper and circulated it to the communities that feed into the school. In it they confront racial issues head on. They take the mainstream media to task for depicting the Black community in the area in stereotypical fashion as “economically depressed” (Thorne, 1998). Another strategy for going beyond the classroom is to organize protests of organizations that circulate inappropriate discourse. Klein (1985), for example, cites the case of a group of students who wrote letters to a publisher who circulated a book that the students found offensive. Although the publisher did offer an explanation, he did not offer to change anything. In the meantime under the guidance of the teacher, the students set about making their own book, which corrected what they believed to be the disagreeable representations of young people in the previously published text.

Focusing efforts on media that circulate discourses widely over various institutions and settings is an important part of strategies designed to challenge and eliminate stereotypical discourses in schools. Given that individuals at the local level can only make sense by placing their experience into these global discourses, it goes without saying that actions at the school level may not be all that successful if these wider patterns go unchallenged. Critiquing and challenging stereotypical discourses in the media and curriculum materials, however, also can provide students and teachers with opportunities to address their local situations. In the course of critiquing and challenging various media and curricular discourses, students and teachers will have many chances to understand how common stereotypical portrayals in their immediate surroundings work. Directly addressing, critiquing, and challenging these local practices in class may also have positive spinoffs. For example, giving William and his friends the chance to be taken seriously by providing them with opportunities to tell fellow students and educators how they understand themselves and others is one way to legitimize and circulate the sense that they ascribe to their world. Acquiring legitimacy in this way is an important first step in getting others to accept these understandings and eventually to change how fellow students and educators think of William and his friends and interact with them. Although these strategies will not provide all the answers, they represent a positive first step in enabling marginal discourses to complete

on a more equal footing and providing more opportunities for traditionally marginalized individuals and groups in educational settings.

Notes

1. Xenophobic behavior of this sort, however, need not necessarily represent a form of racism. Racially prejudicial actions on the part of African Americans or Canadians toward Whites does not necessarily abuse power relationships or serve to advance a differential allocation of advantages (Shohat & Stam, 1994).

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Challenges for Interpretivist Inquiry

The acceptance of qualitative methods into a firmly established objectivist tradition of research in education and educational administration creates particular challenges for researchers whose inquiry is rooted in subjectivism. This article focuses on subjectivist-interpretivist (s-i) inquiry and presents difficulties and dilemmas that s-i researchers may encounter as they conceptualize, propose, and conduct subjectivist inquiry in an academic community that remains traditionally systems-rationalist in nature. Drawing on experiences with individual and collaborative research projects and on observations of proposal adjudications, this article discusses challenges, choices, and compromises that researchers may encounter as they pursue inquiry in an interpretivist tradition. In addition, the author considers potential consequences of various choices and compromises for the integrity of specific research projects and for interpretivist inquiry in general. There seems to be a danger that the dominant paradigm may weaken the s-i position. Subjectivist-interpretivist research has shown enormous potential to contribute to our understanding of education and educational administration, yet much of this potential may be lost if s-i researchers become complacent about the consequences of the choices and compromises they make.

L'acceptation des méthodes qualitatives dans une tradition objectiviste bien établie de recherche en pédagogie et en administration scolaire apporte des défis tout particuliers pour les chercheurs dont les méthodes de recherche sont enracinées dans le subjectivisme. L'article porte sur les recherches subjectivistes-interprétivistes (s-i) et présente les difficultés et les dilemmes auxquels pourraient faire face les chercheurs s-i alors qu'ils conceptualisent, proposent et poursuivent leur recherche subjectiviste dans le cadre d'une communauté académique qui demeure foncièrement par un rationalisme systémique. Se fondant sur son expérience avec des projets de recherche individuels et collectifs, ainsi que ses observations du processus de sélection de propositions, l'auteur discute des défis, des choix et des compromis auxquels les chercheurs peuvent faire face en poursuivant leur recherche dans le cadre d'une tradition interprétiviste. De plus, l'auteur examine des conséquences (pouvant découler de ces choix et ces compromis) sur l'intégrité de certains projets de recherche en particulier, et sur la recherche interprétiviste en général. On déduit que le paradigme dominant risquerait d'affaiblir la position s-i. Alors que la recherche s-i s'est avérée riche en possibilités quant à son rôle à jouer dans notre compréhension de la pédagogie et de l'administration scolaire, une bonne part de ce potentiel risque de se perdre si les chercheurs tombent dans la complaisance quant aux conséquences des choix qu'ils font et aux compromis qu'ils acceptent.

Despite a growing acceptance of qualitative methods by social scientists, the systems-rationalist (s-r) tradition remains predominant in the fields of education and educational administration. Many researchers who adopt qualitative techniques maintain assumptions and conceptualizations similar to those of their quantitative colleagues. This acceptance of qualitative methods into a

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firmly established methodological tradition of objectivism creates particular challenges for researchers whose inquiry has roots in subjectivism.

In this article I consider a range of difficulties and dilemmas that researchers may confront as they conceptualize, propose, and conduct subjectivist-interpretivist inquiry in an academic community such as educational administration, which I contend remains predominantly systems-rationalist in nature. In my discussion of challenges, choices, and compromises that experienced researchers and graduate students may encounter as they pursue inquiry in an interpretivist tradition, I draw on my experiences with individual and collaborative research projects, as well as my observations of proposal adjudications. I describe paths that specific researchers have chosen, and I touch on implications of these actions for interpretive research. Although my own experience has been largely in the field of educational administration, the issues I raise are pertinent to inquiry in other areas as well. Furthermore, because administrators often make decisions that create or constrain possibilities for others, the work of scholars and practitioners in education can be affected profoundly by the theoretical underpinnings of administrative practice and by the accepted approaches to inquiry in educational administration.

I begin my commentary by clarifying two perspectives on research and by arguing that the predominant paradigm in educational administration remains systems-rationalist. Subsequently, I exemplify the two perspectives and raise value questions about which courses of action s-i researchers ought to take. I conclude by considering potential consequences of selected choices and compromises for the integrity of specific research projects and for interpretivist inquiry in general. I hold that enormous potential exists for s-i research to contribute to our understanding of human experience; however, much of this potential may be lost if s-i researchers become complacent about the consequences of the choices and compromises they make.

Two Approaches for Inquiry

I use the phrase *subjectivist-interpretivist*¹ (Carnahan, 1994; 1995) to describe a perspective that acknowledges the social world as constructed reality—a product of human action and interactions and of the meanings that social actors attach to their experiences (Berger & Luckmann, 1966; Denzin, 1989; Ellis & Flaherty, 1992; Greenfield, 1993d; van Manen, 1992). “The social world [is] not ... a world of causes and effects but ... a world of meanings that must constantly be negotiated and renegotiated” (Donmoyer, Imber, & Scheurich, 1995, p. 5). From this perspective, then, reality is value-based rather than factual (Greenfield, 1986; Hodgkinson, 1981; 1991). As Hodgkinson, Greenfield, and other s-i scholars point out, although facts and values are conceptually distinct, social scientists encounter “a world in which facts and values are inevitably and intimately intertwined” (Greenfield, 1993d, p. 181). According to s-is, the selectivity through which humans choose to focus on particular facts and to discount others, the interpretations that people place on their self-selected “facts,” and the meanings that they construct around these facts preclude the possibility of so-called scientific objectivity in social-science research.

Subjectivist-interpretivist theorists contend that real-life situations are not clearly defined; rather, human experience is characterized by ambiguity, uncertainty, paradox, and dilemma. Specific events may be experienced quite differently by different individuals; one individual may attribute different meanings to the same experience or event at different points in time; and one individual may attach multiple (possibly contradictory) meanings simultaneously to a single experience. From this s-i perspective as well, organizations are human inventions: "they are simply manifestations of mind and will" (Greenfield, 1993b, p. 92). "Organizations do not think, choose or act as [systems-rationalist] theories claim; rather individuals do" (Cuthbertson, 1988, p. 20). Thus in exploring the social world s-i researchers tend to focus on individuals, attempting to reveal the meanings of experiences for the social actors involved. Subjectivist-interpretive theorists adopt methods and approaches intended to encompass both the complexities of the human condition and the values that underlie human actions and to capture the multiple meanings that individuals attach to their experiences. From this perspective, then, social science research will seldom lead directly to exemplary solutions of human problems; s-i research and theory can, however, illuminate what individuals do and why they do it (Greenfield, 1993e).

In contrast, systems-rationalist thought accepts an ordered and predictable reality that can be objectively studied and systematically improved (Fullan 1991; 1993; Leithwood & Steinbach, 1995). Systems-rationalist scholars explore a world they characterize in terms of cause and effect, a world they contend is shaped by factors that can be identified, manipulated, and controlled. Systems-rationalists presume that a desirable state, a best practice, can be objectively identified and described and that some state of (near) perfection can ultimately be achieved through logic and rationality. In their view researchers can and should remain objective and unbiased; so s-r researchers seek to stand apart from the reality they investigate. Systems-rationalist researchers claim to dissect and reconstruct that reality, to identify causal links, and to develop universally applicable laws. As Greenfield (1993b) explains in his analysis of systems-rationalism, according to this perspective "facts stand separate and independent from theories about facts ... it is possible to explain facts by theories and thereby gain control over them" (p. 94). Thus s-r theorists tend to work with clearly defined problems and to offer specific and prescriptive solutions to those problems.

A Predominance of Systems-Rationalist Thought

Whether one considers aspects of education or educational administration, it seems a body of s-r wisdom tends to guide contemporary practice in schools and school systems. Although s-i scholars have demonstrated valuable concepts, approaches, and techniques such as holistic learning (Miller, 1990), narrative inquiry (Connelly & Clandinin, 1990), and humane science in administration (Greenfield & Ribbins, 1993), their work has typically not transformed schools and school systems in fundamental ways. Of course, from time to time individual practice has been reconstructed; more often, however, as s-i notions have intrigued "objectivists," they have interpreted and modified the s-i ideas into systems-rationalism. Thus teaching and learning generally re-

mains rooted in rationalism of psychology, while educational administration has not escaped its roots in scientific management and rational organizational theory. Teacher development, which encompasses aspects of teaching and learning and aspects of educational administration, remains caught in systems-rationalism as well. Scholarship and practice in these fields are largely shaped by systems-rationalist thought. Because my own research experience has been primarily in a department of educational administration, I focus momentarily on that area to clarify and emphasize my point.

Over the last two decades scholars and practitioners have scrutinized and critiqued the traditional theory base for educational administration. Subjectivist-interpretivist scholars (Greenfield, 1993d; Littrell & Foster, 1995; Shakeshaft, 1995) have argued that the traditional empiricist approach to the study of human affairs is fundamentally flawed. Some emphasize the moral dimensions of leadership and administration (Greenfield & Ribbins, 1993; Hodgkinson, 1981; 1991; Rizvi, 1985), an aspect of administration that in their view is addressed inadequately by systems-rationalists. Others (Bates 1983; 1994; McLeod, 1978; 1988) highlight a view of power in organizations, which contrasts with the systems-rationalist conceptualization of influence and power. Still others (Ikpa, 1995; Ortiz & Ortiz, 1995; Shakeshaft, 1989; 1995) draw attention to groups such as women and ethnocultural minorities that have been marginalized by the conventional research, theory, and practice in educational administration.

Practitioners too have observed the extant chasm between much of the theory and practice in educational administration. From time to time these practitioners have dismissed particular theories and research findings because these ideas seemed disconnected from their own lived experiences. Still, many school administrators continue to look to the body of systems-rationalist thought in educational administration to provide guidance and/or reassurance for their day-to-day practice (Scheurich, 1995).

In spite of a growing critique of conventional approaches to educational administration, and in spite of the distance between theory and practice, much of the theory and research in educational administration remains cast in a systems-rationalist mode. The enduring text by Hoy and Miskel (1995) *Educational Administration: Theory, Research and Practice* (5th ed.), the massive *Handbook of Research in Educational Administration* (Boyan, 1988), and the respected journal *Educational Administration Quarterly* are but three of the publications that attest to the inertia of this conventional systems-rationalist thought. Similarly, the programs for the annual meetings of associations devoted to the study of educational administration (e.g., Division A, AERA; CASEA) reflect a preponderance of quantitative and qualitative studies cast in the s-r tradition.

Theory and research in the systems-rational mode provide a comfortable and comforting vision of schools and school systems. Systems-rationalism suggests that some "best way" does exist and that a continued search for "objective" factors that can be manipulated and/or controlled will lead to more desirable educational and administrative practices. Thus s-r wisdom shapes much of the administration and policy-making for schools and school systems. In contrast to the s-i vision of a world characterized by ambiguity and paradox, a world in which administrative action leads not to absolute solutions, but to

further challenges and dilemmas, systems-rationalism offers an illusion of a world of clarity. The apparently unbiased understanding of schools, which grows from systems rationalism, implies that if administrators follow the actions prescribed by s-r theorists they can certainly improve the quality of schools and schooling.

This body of s-r wisdom regarding administrative practice has led to an abundance of training programs for educational administrators (Gronn, 1996). Similarly, this s-r wisdom has generally guided selection, evaluation, and promotion in school systems. Images of so-called effective principals (Leithwood & Montgomery, 1986; Leithwood & Steinbach, 1989; 1995) and effective schools (Holmes, Leithwood, & Musella, 1989; Purkey & Smith, 1983) are often reflected in criteria by which administrators are chosen; these images also create a context in which appointees are further socialized to existing organizational norms and values. Thus these s-r images strongly influence how many administrators go about their daily work. Any practitioner who questions the assumption of "one best way" is likely to become marginalized from the processes of policy-making and system administration.

The results of s-r research tend to shape practice, and this practice in turn creates demands for further research in that same s-r tradition. Furthermore, in a context of economic restraint, s-r research, particularly that which claims to lead to exemplary practice, may appear to offer the "wisest" investment of scarce research funds. For example, over the past few years, in calling for research proposals, officials of Ontario's Ministry of Education and Training have emphasized best practices—encouraging researchers to identify, describe, and dissect exemplary aspects of schooling that the officials believe can subsequently be transposed more or less predictably across the province (and beyond). The search for, and description of, best practices, however, generally leaves unexamined the value bases on which these definitions of excellence stand. Thus, although s-i researchers may discuss and/or strive to reveal value positions, ministry officials are likely to find their proposals less practical. The cycle of research and practice that tends to perpetuate s-r thought clearly presents challenges for s-i researchers who reject the notion of a predictable, controllable, perfectable world.

Challenges, Choices, and Compromises

I do not emphasize the so-called paradigm debate, nor do I specifically discuss arguments regarding mixed methodologies. Carnahan (1993, 1994), Green, Caracelli, and Graham (1989), Greenfield (1993d), Pitner (1988) and others have addressed these issues in detail. Instead I have chosen to present some of the challenges for researchers who attempt to pursue inquiry in the s-i tradition while the field in which they work remains largely shaped by systems-rationalist thought. In the following sections, therefore, I focus on the research experience; I highlight challenges, choices, and compromises that various researchers² have faced (or may face) as they attempt inquiry in an interpretivist tradition.

Challenges Associated with Proposals

Because many adjudicators and evaluators of proposals for research in education and educational administration hold s-r views, s-i researchers face difficult

decisions as they propose work cast in a less popular tradition. These s-i researchers do not seek universal, predictable patterns; instead, they typically direct their attention to the individual, the unique, and the particular, attempting to reveal the meanings of experience for those involved.

Although a routine occurrence, a specific issue, an unusual event, or some particular “itch to know” may prompt s-i researchers, the precise questions that guide their inquiry are often shaped and reshaped as inquiry progresses. At the same time, although these s-i researchers pursue their studies in a particular perspective, they do not generally begin with predefined, specific conceptual/analytic frames about the phenomena under study. Instead, these researchers develop their understandings of the phenomena and their interpretations of their data through ongoing exploration of literature. In time this interactive process leads researchers to frameworks they consider appropriate for their emerging analyses.

Similarly, although s-i researchers often have some general sense of the kinds of data they will collect, they often develop the specific procedures throughout the research process. In the same emergent way, s-i researchers do not typically prepare an extensive and explicit plan for data analysis in advance of the analysis itself. Although they may bring preliminary organizers to analysis, s-i researchers often discard these initial conceptualizations as more appropriate organizers emerge either from the data or through an ongoing review of literature. The research process from an s-i perspective involves understanding and describing reality according to the perceptions of those involved in its construction. Thus accepting a conceptual or analytical frame in advance or restricting data collection in particular predefined ways imposes meaning on the reality s-i researchers seek to explore rather than assisting them in extracting meaning(s) from that reality. Researchers using ethnographic methods to study aspects of education and educational administration (Ball, 1988; Carnahan, 1994; Donmoyer, 1995; Wolcott, 1973; Woods, 1986) may immerse themselves in a particular setting and over time clarify the direction of their inquiry as they interweave data collection and analysis in a continuous and cyclical process of extracting meanings and developing interpretations.

In the world of systems-rationalists, however, studies with emergent designs tend to appear inadequate. Systems-rationalist researchers typically seek universally applicable laws, predictable patterns, causes, and effects. Thus these researchers normally identify conceptual frameworks that define the phenomena, enunciate clear and specific research questions and subquestions, specify the data they will collect, and select frameworks to guide analysis before they begin to collect data. Although various scholars in this mode have moved beyond the traditional methods of natural science, beyond measurement, questionnaires, and statistics to include qualitative techniques such as interviews, journals, and observations, s-r researchers who study education and educational administration typically undertake their inquiry to identify factors, patterns, and interrelationships that they subsequently generalize to broad populations. With a plan of research more or less clearly established in advance, systems-rationalist researchers tend to dissect a phenomenon in order to describe excellence or to identify “essential” patterns for improved practice.

Given this context, experienced researchers seeking research grants and graduate students designing thesis research may face a number of challenges and choices as they propose to study education or educational administration in an s-i manner. For example, one important choice involves the selection of research colleagues. "With whom shall I work?" Another set of choices involves consideration of the "jury." "Who will judge the proposal and how closely should I craft the proposal to match the expectations of that jury panel?" Thus interpretive researchers may grapple with decisions regarding how many specifics to determine (or at least suggest) in advance of the study and which particular aspect of their inquiry to set out in the text of a particular research proposal. An additional challenge for experienced researchers seeking funding for s-i research involves justifying the substantial budgets often associated with labor-intensive research.

Colleague Compatibility

The choice of colleagues presents a particularly important decision for s-i researchers. Some years ago I had the opportunity of observing four other researchers conducting inquiry about how the organization of secondary schools contributes to the "problem" of dropping out. These four individuals with various sociological perspectives had agreed to investigate this issue of common concern collectively. One of the researchers proposed a project consistent with s-i thought. The other three proposed studies that in my opinion involved varied degrees of "objectivity." In paradigmatic terms, it seemed that these three researchers held views that fell within a functionalist paradigm (Burrell & Morgan, 1982). Although at the time my own work was moving away from objectivist traditions, I had agreed to assist this research team with the statistical analysis. Thus I attended meetings of the principal investigators as an interested observer, and with their consent later wrote about the research process (Wignall, 1989).

As they began their collaborative project, the four researchers agreed to prepare a common literature review and to coordinate their data collection. At the same time they recognized their divergent approaches and planned to write separate case chapters for the final report. Still, from the outset they agreed that the project report would conclude with a collaborative chapter integrating and synthesizing the four lines of inquiry. As events unfolded, however, the s-i researcher and her work became marginalized both throughout the research process and in the final written report. The dominant paradigm, in essence, governed the study. To begin the team conceptualized and expressed the overall research problem in the tradition of systems-rationalism, focusing on factors that affect retention. As the work progressed, the team expended far more resources (time and money) on the rationalist portions of the project. Although the s-i researcher assisted with the development, administration, and analysis of project questionnaires and conducted interviews that were suitable for the work of other team members, the data collected by the s-r researchers were of less value for her interpretive study. In their interviews and observations the s-r researchers brought specific, well-defined conceptual and analytical frames that imposed meaning on data rather than capturing the lived realities of the participants. As the team developed the project report the

rationalist views predominated. Although the team included a collection of interpretive studies in the literature review, in the final writing this body of work was set as secondary—as work that suggested interesting notions, but notions that themselves needed confirmation by broad-scale, generalizable (perhaps quantitative) studies. This same subordination of s-i views occurred in the final chapter where the findings from the interpretive inquiry received secondary status. It seems that the strength of numbers (three researchers versus one), the power of accepted modes of inquiry (Mackie, 1989), and the expectations of educational administrators whose practice is typically rooted in functionalist thought added credence to the objectivist, s-r research.

The present funding trend, which encourages large-scale, multi-researcher projects and partnership initiatives, is changing the nature of the research experience for many academics. Collegiality among faculty members, the tradition of respecting one another's academic work, and the desire to maintain enduring, amicable, professional working relationships raise a number of dilemmas for many researchers involved in collaborative work. Researchers whose work is cast in a less popular, s-i tradition, and who become involved in collaborative projects with researchers working from other paradigms, may find these quandaries exacerbated. For when judged by traditional criteria, aspects of their s-i work might seem weak or inadequate. When and how should these s-i researchers challenge the s-r tradition? When do concessions made in a collaborative venture compromise the integrity of an s-i substudy or line of inquiry?

Students' work may be affected by both colleagues and supervisors. Decisions regarding thesis committee members (or proposal/thesis examiners) tend to shape to some extent the nature of the work. For example, I have observed several graduate students who through their graduate courses became open to the possibilities of interpretive research and so began their thesis journey with an interpretivist orientation. In several cases, however, although committee members attempted to support a student's efforts and directions, all advisors were not equally committed to interpretivist approaches. Consequently, as each student's work progressed, advisors less committed to s-i research than the student and far less familiar with the data and the methodology offered well-intended advice. Yet as these students accepted pragmatic suggestions for techniques and frameworks, their work moved away from interpretivism. Ultimately the advice imposed external meaning on a subjectivist dataset rather than extracting meanings from it.

Adjudication

In addition to choices concerning research colleagues, other concerns at the proposal stage involve the presentation of ideas. More specifically, a typical group of evaluators gathered to evaluate proposals in education or educational administration is likely to include several members who subscribe to s-r traditions. To what extent should an interpretivist set out tentative details of proposed inquiry in fairly specific ways? Systems-rationalist researchers value clearly enunciated research questions, predefined conceptual and analytical frames, and precise plans for data collection and analysis. For s-i scholars, however, questions, frames, and procedures emerge and evolve during the

research process *per se*. Consequently, in attempting to obtain endorsement of, and/or funding for, particular projects, s-i researchers may contemplate a range of concessions to s-r thought. At what juncture do these decisions begin to compromise the integrity of the research?

A few years ago, for example, a colleague and I proposed a study to document challenges that school administrators faced in the day-to-day operation of their schools and to collect their reflections on how their professional training and personal experiences had prepared them to meet these challenges. We anticipated that administrators would identify specific challenges that were particularly relevant or meaningful for them and that they would share the details and their understandings in unstructured interviews. We knew, however, that for a particular grant competition the adjudication team included field-based personnel as well as academic scholars (both qualitative and quantitative researchers). Thus in our proposal we specifically discussed our decision not to seek “exemplary” administrators, because in our view any definition of excellence has a value base. We explained that in all likelihood various stakeholder groups would have alternative (quite possibly conflicting) views regarding the characteristics of exemplary administration. As we developed our proposal we chose, however, to refer to specific frameworks that might describe problem-solving practices and to include a conceptual framework that might define problem areas. In spite of our efforts to explain ourselves and to offer potentially specific approaches we did not receive funding for this proposal. The committee criticized us on several grounds: we had not focused on exemplary practice; our sample of 30 administrators was too small; and our findings in the opinion of the adjudicators would not provide generalizability. From the feedback we received we concluded that the committee rejected our proposal because the research design did not meet s-r criteria.

Although in some ways we felt disheartened by this feedback we persevered and revised our proposal. In a subsequent grant submission we indicated that on completion of the interview phase we intended to select two or three individuals whose practice appeared to be exemplary and to shadow these principals for an extended period. Finally, we proposed a survey questionnaire for a much larger sample of administrators (essentially to confirm findings from the earlier “interpretive” stages). This time the project received funding. Although this funded proposal contained a number of compromises, at the time we believed these changes would not jeopardize the integrity of our work. Nevertheless, these kinds of compromises do tend to reinforce s-r positions: (a) that exemplary practice does exist and can be clearly identified; and (b) that interpretive research merely provides preliminary insights that need confirmation by larger-scale, “broadly generalizable” s-r research.

Funding

Another challenge for s-i scholars proposing research studies involves justifying the time and costs associated with data collection, especially when observations, interviews, and transcription merely produce “soft” data. (And even though Levin, 1976, and Greenfield, 1979, have suggested that so-called hard data may more appropriately be described as “cheap” data, the criticism of interpretive research continues in the field of education, particularly educa-

tional administration.) Grant committees with limited research funds face complex challenges in ranking proposals and determining appropriate and equitable allocations for projects cast in alternative traditions. Proposals from s-r researchers often appear to promise clear and specific solutions to contemporary difficulties and problems. Although in the end such promises may not be fulfilled, at the adjudication stage these studies are likely to appear more relevant, more practical, more generalizable, and so more important to s-r researchers and/or practitioners on selection panels. Therefore, in the competition for funds, large survey works may have an advantage because they seem to promise more valuable results and to offer effective and efficient use of scarce resources.

Challenges in Fieldwork

Subjectivist-interpretivist researchers encounter a range of challenges associated with their work in the field. For example, gaining access to a research site can become a particular challenge for interpretivist researchers. The world of many gatekeepers itself is shaped by s-r thinking. The kinds of research questions valued by administrators often differ from the questions enunciated by s-i investigators. As a result, gatekeepers holding s-r views may refuse access for projects that appear relatively unimportant when compared with s-r studies. Similarly, key individuals in a particular research site may also hesitate to participate in s-i projects because they question the merits of the work.

Potential participants may also be concerned about the demands that s-i research places on them. For example, the extensive time commitment may discourage busy educators and administrators from participating personally in an interpretivist project. Educators and administrators may also be concerned about informed consent and decline to participate in interpretivist studies with emergent design. Moreover, administrators accustomed to controlling situations and managing those around them may find the potential loss of control over the reporting of interpretive research extremely disconcerting. For example, in the event of a particular high-profile case, a researcher cannot always guarantee anonymity to participants. Although association with a "positive" case may well enhance an administrator's career prospects, association with a "neutral" or "negative" case could conceivably damage a promising career. Thus gatekeepers and potential participants who view the world through s-r lenses periodically create obstacles for s-i researchers. Still, gaining access to a research setting obviously remains an essential step for any researcher. An s-i researcher who cannot convince gatekeepers and potential participants of the value of a project will be unable to proceed with his or her work. Consequently as s-i researchers describe their proposed studies to gatekeepers and potential participants, they may consider concessions or make particular presentations intended to accommodate expectations rooted in the s-r thinking of certain educational officials. To what extent are such concessions or representations appropriate?

I recall an instance when in order to gain access to a key school a research colleague accepted certain conditions. He agreed to return transcripts to participants at one site and to offer these participants editorial license over their quotations in all publications stemming from the project. Moreover, because

the particular school principal was accustomed to (and insisted on) "calling the shots," the researcher also offered him final editorial privilege. In the first instance, no member of the project team objected to this decision, although no one else found it necessary to make similar commitments to gain access to other sites. Only at the end of this project did we realize many of the implications of these concessions. The participants at the one site exercised their editorial licenses quite liberally, translating their comments, which had initially been transcribed verbatim, into formalized written text. As a result, in our final project report most case reports presented conversational excerpts (with occasional sentence fragments and incomplete thoughts) that appeared free flowing and natural, whereas in one case little if any spontaneity remained evident in the well-edited "conversation." Thus the characters from that site remain rather flat on the printed page; the spark of the school does not shine as brightly in the report as it was experienced by the researchers who visited the site. Furthermore, the school principal occasionally imposed his judgment on the text, and so the story from the school also remains somewhat incomplete. Nevertheless, the research team believed the site to be critical for the study, and the researcher involved at the site felt he would have risked access or been unable to report his findings from this important site had he not accommodated the wishes of participants.

Another practical consideration of interpretive research relates to the emergent nature of the work. Every story, it seems, leads to another story, and researchers occasionally find it difficult to conclude data collection and/or analysis. Unlike s-r research, which is typically well planned in advance of the research process, interpretive work tends not to involve predetermined structures and arbitrary timelines. However, participants in such projects may prefer some containment, if not predictability. Educational administrators, for example, accustomed to rational planning often expect a clear structure for the research process and may, therefore, undervalue projects with emergent designs that appear to lack rational planning or rigor. Administrators may become concerned about emerging demands on staff time that in their view could undermine the effective operation of a school. Similarly, administrators are likely to appreciate some degree of certainty regarding their own participation in a research project. Thus administrators may withdraw themselves and/or their school from a study as it expands. Even when administrators remain personally committed to a particular line of inquiry, they may find themselves transferred to new responsibilities; alternately, circumstances at the site may change and administrators may prefer to withdraw individually or institutionally from a study. Thus interpretivist researchers may encounter frustrations as they recognize intriguing and important issues just as particular participants or a research site withdraw from or curtail the study. To what extent should a researcher press for continued access?

Another important issue for all researchers involves ethics and the integrity of their work. For s-i researchers, however, particularly thorny issues may well arise during the research process. Lincoln and Guba (1990), Magolda and Robinson (1993), Dickson (1995), and others (Cassell, 1980; Glesne & Peshkin, 1992; Punch, 1988, 1994; Sieber, 1982, 1992) discuss a range of such concerns in detail. At the outset of a project an s-i researcher may not anticipate the full

scope of issues that ultimately emerge. Thus they may overlook particular considerations and fail to implement appropriate safeguards—those that protect participants and those that protect researchers. One might hope that a formal ethical review process would alert a researcher to potential difficulties and provide her or him with advice and guidance. However, because s-r thought dominates the field, the composition of an ethical review committee in education or educational administration is likely to reflect this s-r perspective. Potentially complex issues and possible pitfalls of an s-i project may go unnoticed by reviewers who themselves conduct s-r research. Informed consent illustrates such an issue. A research protocol, for example, may describe an s-i project that appears to have little or no risk for participants, yet during the research process, as events unfold, risks for participants may become more apparent. Similarly, at the outset of an interpretive study a researcher may offer a guarantee of anonymity to participants, yet as unique aspects of the particular case or phenomenon present themselves, the researcher may be unable to honor this undertaking. Although researchers often resolve these issues as they emerge, timely advice from colleagues familiar with s-i research may avoid the possibility of revising or canceling a project in progress and so facilitate the smooth conduct of ethically defensible research. What kinds of collegial support regarding ethical conduct and integrity of research can an s-i researcher reasonably expect?

The final challenge related specifically to fieldwork that I address here involves mixed allegiances to participants and to funding agencies; it concerns the possible withdrawal of key participants toward the end of a funding period. Certainly the fundamental issue of participant withdrawal affects student work as well, but I focus here on funded research. Although I have not yet personally experienced participants withdrawing toward the end of a research project, the possibility continues to perplex me. For example, circumstances in the lives of various participants have delayed progress on my own study of educators living with potentially life-threatening illness who remain able to work. Although the funding agency (in this case SSHRC) has generously extended the grant period, issues regarding the most appropriate allocation of funds still perturb me. How closely should a researcher remain to original plans? What allocation of resources will produce a more valuable report—or at least a report worthy of the funds expended? What allegiances does a researcher have to individuals who initially agreed to participate but who for extended periods have been unable to participate in interviews and other research activities? How should a researcher balance responsibilities: to the granting agency that expects a meaningful report within a reasonable time frame; to those who have completed their participation; and to those who have agreed to share intensely personal stories, who have already invested considerable time and energy in the project, but who for reasons beyond their control have been unable to participate for some time?

Challenges of Dissemination

In addition to issues that emerge from the process of inquiry, further challenges arise in reporting interpretivist research. As I suggest above, in the telling of research certain stories will be expressed while others may be silenced. What

implications does this selective reporting have for the integrity of research? Dickson (1995) speaks of this issue in detail. I share but one example from my own experience here. On completion of a particular study of several secondary schools, our research team sent copies of the report to participating schools. A few months later I received a call from a teacher at one participating school who had not participated in the study but who claimed to recognize his school in our final report. This teacher contended that the principal had "controlled the selection of participants" and "contaminated" the data. Furthermore, the teacher requested a meeting "to present the other side of the story." Although I refused to confirm or refute his suspicions regarding the identity of the site in the report, I was able to assure him that criteria established by the project team and not particular preferences of individual school principals had guided the selection of participants at all sites in the study. Nevertheless, because this teacher knew that data had been collected for our project in his school, I did agree to meet with him and to discuss general issues concerning research. Through that conversation I learned more about this school, and after our meeting my thoughts wandered to a range of *what-ifs*. What if that teacher could direct me to another important story—would I have a responsibility to attempt to follow it? What if that new story contradicted the original report? What if this teacher had been able to convince me that the principal had controlled the selection of participants, would I have an obligation to amend the original research report?

Issues such as the potential identification of participants, fictionalization to preserve anonymity, and shared authorship with participants are among the issues related to dissemination that concern many researchers. For s-i researchers, however, reaching the desired audience becomes a further challenge. As I suggest above, many mainstream conferences and publications are rooted in s-r thought. As a result, interpretivist reports may not readily meet selection criteria for presentation or publication in conventional forums. And although s-i researchers may find sociologically oriented journals that report qualitative studies more receptive to their work, these publications may not reach the particular audience (e.g., researchers and practitioners of education and educational administration) that a researcher wishes to address. Thus in the dissemination phase s-i researchers may feel pressure to step beyond description and to make specific (even prescriptive) recommendations for practice in order to meet s-r criteria for quality and to increase their chances of publication or presentation in particular venues. What concessions should an author consider in order to further dissemination and to ensure her or his work reaches a particular audience?

I have mentioned but a few of the challenges, choices, and compromises that continue to confront s-i scholars. Subjectivist-interpretivist research, it seems, is rife with dilemmas. As s-i researchers continue to inquire into aspects of education and educational administration, they will take decisions that affect more than their own work. Their decisions hold implications for the broader research community.

What Future for Interpretive Research?

In various ways, techniques of subjectivist-interpretivism have been adapted and incorporated into the tradition of systems-rationalism. At the same time, s-i researchers may periodically make choices or compromises that bring their own work more in line with systems-rationalism. How will this process unfold?

Qualitative research methods, initially denigrated by the rational empiricists, have more recently been acknowledged as appropriate by many educational researchers, whether or not their own work integrates these approaches. Not so long ago, for example, researchers adopting qualitative methods devoted considerable space in proposals and research reports to address questions of objectivity and researcher bias and to argue for the validity of their alternative methods. Today, however, qualitative methods (if not methodologies) have become acceptable (even desirable) forms of inquiry in the study of education and educational administration. Although researchers often include a rationale for their research design, the nature of their commentary has changed; they now tend to focus their argument on the appropriateness of methods for their particular research problem rather than justifying qualitative methods *per se*.

Many researchers who adopt qualitative methods for the study of education or educational administration continue to cast their work in a systems-rationalist mode. In other words, these modern s-r researchers adopt strategies such as interviews and observations to their study of causes and effects in a world that they conceive as ordered and predictable. They develop research instruments that appear objective and call on analytical frames that stand separate from their data in a search for generalizable findings. Even so, not everyone concerned about education and educational administration has fully accepted these qualitative approaches. Some researchers (Pitner, 1988; Willower, 1980) conceptualize qualitative studies as “a kind of lower level of approximate empiricism” (Greenfield, 1993d, p. 175) that “must be validated through later quantitatively oriented theory and inquiry” (p. 117). In much the same way, many policy-makers and educational administrators continue to place more credence in quantitatively based theory and research.

The concept of values—set aside in Simon’s (1957) science of administration—has, for example, reemerged as a respectable focus for inquiry in educational administration. This recent emphasis appears to acknowledge the interpretivist critique of Greenfield, Hodgkinson, and others regarding traditional approaches to the study and practice of educational administration. For as Greenfield (1993a) explains, “the world of will, intention, experience and value is the world of organizations and administration.... Administrators represent values ... they also impose them” (p. 153). The concept of values expressed by Greenfield and the importance of values in the practice and study of educational administration that he describes differs substantially, however, from the directions that some (Begley, 1988, 1996; Campbell, 1992; Campbell-Evans, 1988; Holmes, 1991) have taken as they seek to classify objectively, perhaps even to prescribe, desirable values in administration. As Greenfield (1993d) explains, “values lie beyond rationality. Rationality to be rationality must stand on a value base. Values are asserted, chosen, imposed or believed.

They lie beyond quantification, beyond measurement" (pp. 182-183). By introducing the term *values* (although not the concept as Greenfield conceives it) into systems-rationalist scholarship, s-r researchers appear to respond to elements of Greenfield's critique. Yet this move may ultimately weaken the position of those who seek to study Greenfield's value-laden world of administration in an s-i manner. Similarly, as s-r researchers acknowledge and adapt s-i methods and techniques, they may appear to consider, if not address, challenges posed by s-i scholars who have critiqued the traditional field of research in education and educational administration. In the face of such co-optation, it may become increasingly difficult for s-i researchers to preserve the integrity of subjectivist-interpretivism.

Perhaps more important yet are the implications of choices and compromises made by s-i researchers themselves. At any stage of their research, from proposal, through fieldwork, to dissemination, s-i researchers seeking recognition (or approval) for their inquiry may, to some extent at least, recast their work in ways that more closely reflect s-r expectations. Thus, as s-i researchers respond to difficulties and dilemmas associated with their own research, they may from time to time make choices and compromises that ultimately sustain rather than challenge s-r thought. Paradoxically, however, compromises taken by s-i researchers may lead to a productive dialogue with s-r thinkers. For, in spite of the predominance of s-r thought in education and educational administration, a number of scholars and practitioners believe that their work ought to recognize and encompass the complexities of human existence.

In my discussion of the challenges of conducting s-i research in a field dominated by s-r thinking, I consider a range of issues and dilemmas. Although I recognize that open-mindedness, flexibility, and adaptability are themselves essential to s-i inquiry, I am personally perplexed by the implications of certain concessions I have made in order to complete various projects. At times I fear my actions may serve to weaken the paradigm I support intellectually.

I remain caught in the world marked by ambiguity, paradox, and dilemma. Those whose own work is shaped in a systems-rationalist perspective are likely to fault my discussion of choices and challenges because I have not attempted to provide prescriptive advice or develop a set of rules that one might follow in perfecting precise, logical solutions to specific problems. Although s-r scholars may expect this move from the world of *is* to *ought*, Greenfield (1993e) reminds us that theory only "tell[s] us the way things are rather than how they ought to be or how we should like them to be" (p. 8). He goes on to stress that "administration is a moral art ... a matter of will and power: of bending others to one's will and being bent in turn by others" (1993a, p. 166). For me research is similarly value-based, and researchers bear moral responsibility for their work. As researchers we have the potential to affect our own world and the world of others in both small and far-reaching ways. Just as educators have been encouraged to reflect on their personal practice, we who study education and educational administration ought to remain self-reflective. "The purpose of social science is to understand social reality as different people see it and to demonstrate how their views shape the action they take within that reality"

(Greenfield, 1993c, p. 10). Research remains a social endeavor that could be enhanced by further inquiry into the process of inquiry itself. As researchers we are responsible for more than our intentions. Ultimately we are responsible for the choices we make and for the consequences of our actions.

Notes

1. Burrell and Morgan's (1982) two-dimensional framework identifies four sociological paradigms. This discussion highlights different views regarding the nature of social science (their horizontal dimension), rather than different views about the nature of society (their vertical dimension).
2. I illustrate these challenges as they affect the work of both experienced researchers and graduate students throughout the research process.

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Addressing Instructional Technology Needs in Faculties of Education

Faculties of education throughout the country are experiencing increased pressure to produce graduates who are both confident and competent in using technology in their classrooms. Before changes can be made, however, a clearer picture of where we currently are is needed.

Partout au Canada, on exerce de plus en plus de pression sur les facultés d'éducation pour qu'elles forment des diplômés qui sont à la fois confiants et compétents quant à leur utilisation de la technologie dans la classe de classe. Il nous faut, par contre, une image plus claire d'où nous en sommes présentement avant de pouvoir effectuer des changements.

Introduction

The integration of computer technology into the curriculum has recently become a key component of many school boards' instructional technology plans across Canada. In the fall of 1996 we conducted a survey of these technology plans in the province of Alberta and found the following to be a basic list of computer skills required by teachers: keyboarding, word-processing, spreadsheets, databases, desktop publishing, ethics in technology, multimedia, network communication including Internet and e-mail, and knowledge of classroom management or administration software. In conversations with district-level school board personnel it was made clear that a sound knowledge of and skill with a variety of computer functions, as well as an understanding of how to integrate that technology into teaching to support and enhance children's learning were essential for new teachers being hired. Some school boards may even require demonstration of basic technology competences before granting a permanent contract. Thus a low level of technology literacy could seriously limit a beginning teacher's employment opportunities.

Provincial and federal government initiatives support and encourage this emphasis on computer technology in schools. Alberta Education's (1997) document *Learner Outcomes in Information and Communication Technology* and the policy position paper *An Integrated Framework to Enhance the Quality of Teaching*

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in Alberta (Alberta Education, 1996) exemplify these initiatives. The former document identifies technology learner outcomes for early childhood school to grade 12. The latter identifies key competences for teachers and provides direction in the development and delivery of a preservice teacher education program. In one section it specifies that teachers with an interim certificate must understand

the functions of traditional and electronic teaching/learning technologies. They must know how to use, and how to engage students in using these technologies to present and deliver content, communicate effectively with others, find and secure information, research, word-process, manage information, and keep records. (p. 25)

The focus from Alberta Education is the effective integration of computer technology throughout the curriculum. Of course, the use of technology in the classroom may be envisaged in many different ways. What follows is our vision of technology integration.

Taylor (1980) described three roles for the computer in the classroom. In the tutor role the computer is used to deliver computer-assisted instruction to the student. In the tutee role the student uses the computer to program. In the third role, as a tool (such as word-processor, spreadsheet, database, Internet, etc.), the student uses computer technology to achieve a task. Researchers suggest that the computer as a tool is the most effective use of our resources in schools because it has the potential to promote cognitive development (Jonassen, 1996; Logan, 1995). A recent review of the literature indicates that "New technologies have the power to stimulate the development of intellectual skills such as reasoning and problem solving ability, learning how to learn, and creativity" (Gregoire, Bracewell, & Laferriere, 1996). So here effective integration of technology refers to the use of computers as tools for critical and creative thinking.

We acknowledge the considerable debate in the education field about the merits and benefits of computer technology; however, such discussion is beyond the scope or intent of this article. In Alberta Education's School Technology Advisory Council, which includes school district and university representatives as members, is clearly establishing the direction for a stronger integration of technology across the curriculum. Faculties of education must now respond to that directive.

For teachers to be effective users of the technology they need to develop certain basic skills. Traditionally these basic skills have been part of preservice education programs; however, Raiford and Braulick (1995) point out a widespread problem. Although basic skills are important, our preservice programs need to go beyond teaching basic skills. Beginning teachers are supposed to be able to integrate technology into their classrooms, but universities and teacher education programs do not offer enough instruction to foster in preservice teachers the skills needed for effective integration. Consequently, faculties of education throughout the country are experiencing increased pressure from government and school district level initiatives to produce graduates who are both confident and competent in using technology in their classrooms.

Our Faculty of Education has been teaching a basic computer skills course for at least 15 years. This course was introduced on the assumption that

students were entering the Faculty with minimal or no knowledge of computers. Today we have a much different situation. Some students have acquired many skills, whereas others seem to have superficial skills or none at all. Before making changes that would focus on the integration of technology, we needed to know the extent of computer knowledge in our Faculty.

Statement of Purpose

There were three objectives for our needs assessment. One was to determine what instructional technology skills would be required by Faculty of Education students and staff at the University of Alberta as recommended in the Alberta Education and school district technology plans. The second was to identify current levels of instructional technology skills held by our undergraduate students. The final objective was to identify barriers faculty face when trying to model the use of instructional technology.

Research Plan and Methods

The first step in this project required collecting technology plans from Alberta Education and Alberta school districts. In December 1996 letters requesting copies of technology plans were sent out to 30 school districts across the province. Plans were obtained from 13 school districts. Alberta Education's (1997) *Learner Outcomes in Information and Communication Technology* and the technology plans of various school boards were reviewed in order to identify a list of required technology skills. Two questionnaires were developed, one for preservice students and the other for university faculty. Items were developed for a student questionnaire that would provide information about the level of familiarity Faculty of Education students had in the areas identified by the district plans. Some district plans even recommended specific software, hence the questionnaire queried students about their familiarity with software identified in the district technology plans. The questionnaire also asked students about regular access to a computer off-campus and about the hardware configuration of that computer. Such information is important when making decisions about the future direction of technology purchases in the Faculty. Some items regarding computer access and hardware configuration came from a similar questionnaire distributed by the Faculty of Business at the University of Alberta.

Several faculty members and graduate students reviewed the questionnaire, and appropriate revisions in wording were made. The questionnaire was distributed to 1,200 undergraduate students in the Faculty between February 1997 and April 1997. In addition, 16 students were interviewed to gain further insight into their history of computer use, their current computer knowledge and skill levels, their computer experiences in the Faculty of Education, and their feelings of preparedness to use computers in their future teaching. All full-time instructional staff received the faculty questionnaire.

Findings

Student Questionnaire Responses

Faculty of Education undergraduate students voluntarily completed the questionnaires during class time. As a result 32% of the undergraduates completed questionnaires (see Table 1). Most of the respondents were female (women =

Table 1

	<i>Number in Faculty</i>	<i>Number Distributed</i>	<i>Number Returned</i>	<i>Percentage Represented</i>
Elementary	1,678	unknown	525	31
Secondary	1,299	unknown	426	33
Total	2,977	1,200	963*	32

*Some of the respondents did not complete questionnaire items used to determine program, age, and gender.

68%, men = 32%). Most were between 20 and 25 years of age and were in the third or fourth year of their undergraduate program.

Students were asked if they had regular access to an off-campus computer for personal use. Most (81%) responded Yes to this item. Of the 19% that did not have access to a computer, 36% were planning to purchase one within the next year. Looking specifically at gender, type of program, and age, there did not appear to be any group that was more disadvantaged in terms of obtaining regular access to a computer off campus (see Table 2). Although other studies have identified differences in gender access to computers, this survey of our students indicated otherwise (Spenneman, 1996).

Most of the students had access to IBM PC-type computers (76%). Students seemed to be most familiar with the Windows operating system and many were familiar with both Windows and the Macintosh operating system. Modems suitable for Internet connections were available to 70% of the students who had access to a computer off campus. Most of the respondents accessed e-mail (71%), and for the most part they used either PINE (65%) or Eudora

Table 2

<i>Group</i>	<i>Percentage of Students with Regular Access to a Computer Off-Campus</i>
<i>Gender</i>	
Male	83
Female	80
<i>Program</i>	
Elementary	78
Secondary	83
<i>Age</i>	
19 or less	82
20-25	81
26-30	74
31-35	91
36-40	83
over 40	77

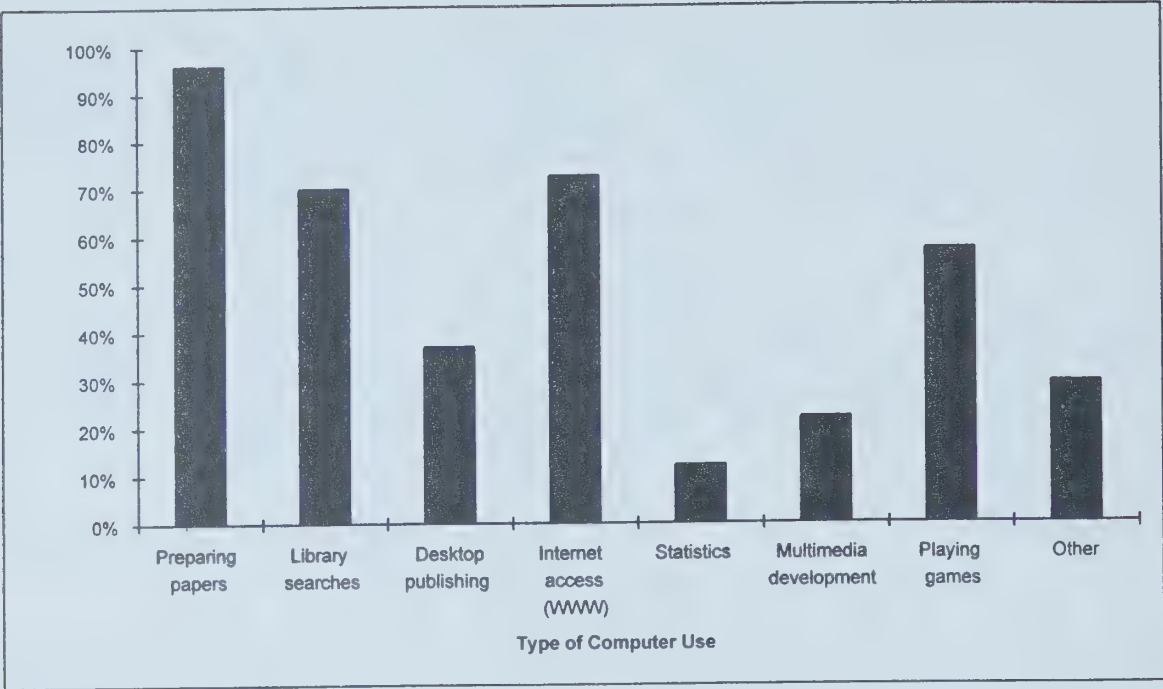


Figure 1. Percentage of students using computers for various tasks.

(33%). Of the 182 students who did not have access to a computer off campus 39% did not use e-mail. On the other hand, of the 777 students with access to a computer off campus, 26% did not use e-mail.

Most of the students had used computers for several years (see Table 3). Almost half (46%) of the students spent one to five hours per week on a computer (see Table 4). Most used computers to prepare papers, library searches, and to access the Internet (see Figure 1).

Students were asked to indicate on a three-point scale (not familiar, basic knowledge, very familiar) how familiar they were with certain types of applications. Although these students reported several years experience using a computer, their familiarity with various applications seemed to be restricted primarily to word-processing (see Figure 2).

Students were asked to indicate on a three-point scale (not familiar, basic knowledge, very familiar) how familiar they were with a specific application (Figure 3). The software identified was selected because it was specifically identified in many of the school district plans. It would only make sense that the applications demonstrated in preservice teacher education programs should be similar to those used by schools.

Table 3

Years Using a Computer	Percentage of Students
Fewer than 1	4
1-2	12
3-5	36
6-10	31
More than 10	15

Table 4

Average Number of Hours/Week	Percentage of Students
Fewer than 1	15
1-5	46
6-10	22
11-15	7
16-20	4
More than 20	3.5

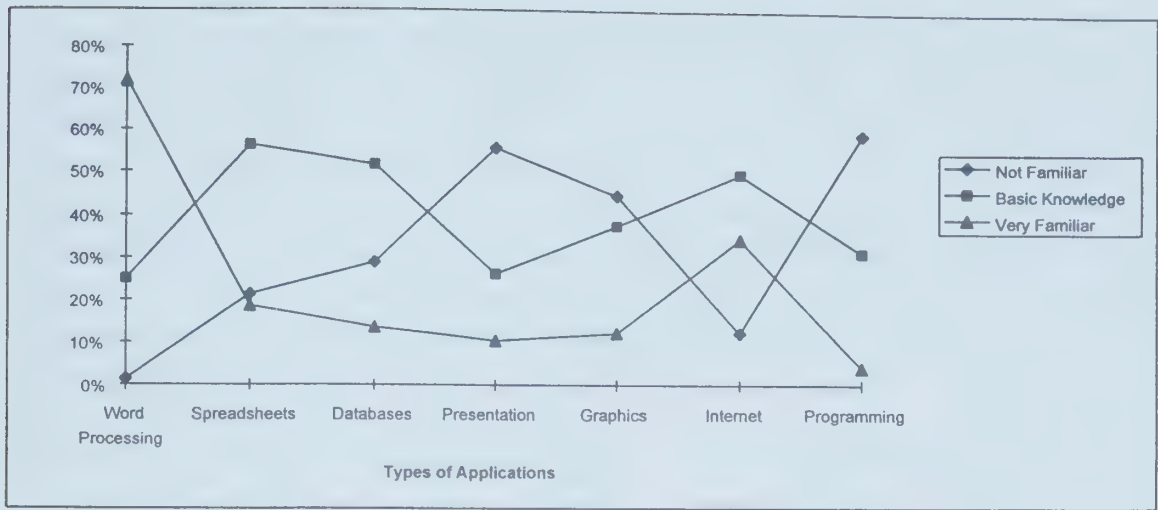


Figure 2. Student familiarity with various applications.

The students surveyed acquired their computers skills in junior /senior high school (39%), university/college (66%), off-campus courses (8%). Most students (80%) believed they were self-taught as well.

Student Interviews

Of the 16 undergraduate students interviewed about their responses to the questionnaire, most began using computers in the mid- to late 1980s. Initially they used computers mostly as word-processors, but in the last few years e-mail, Internet access, and CD-ROM software were being used more frequently. A few students had set up their own home pages on the Internet as well. It appeared that most of the younger participants (age 19 to mid-20s) were more comfortable using recent technological developments such as those mentioned above than were the older students.

As education students the interviewees noted that they used computer technology in the following ways: most did Internet research and used ERIC and CD-ROM databases; most used computers for word-processing papers; a few e-mailed assignments to professors; and several had used PowerPoint in class presentations. During practicum most of the interviewees did not integrate computers into the curriculum as instructional tools, but rather used

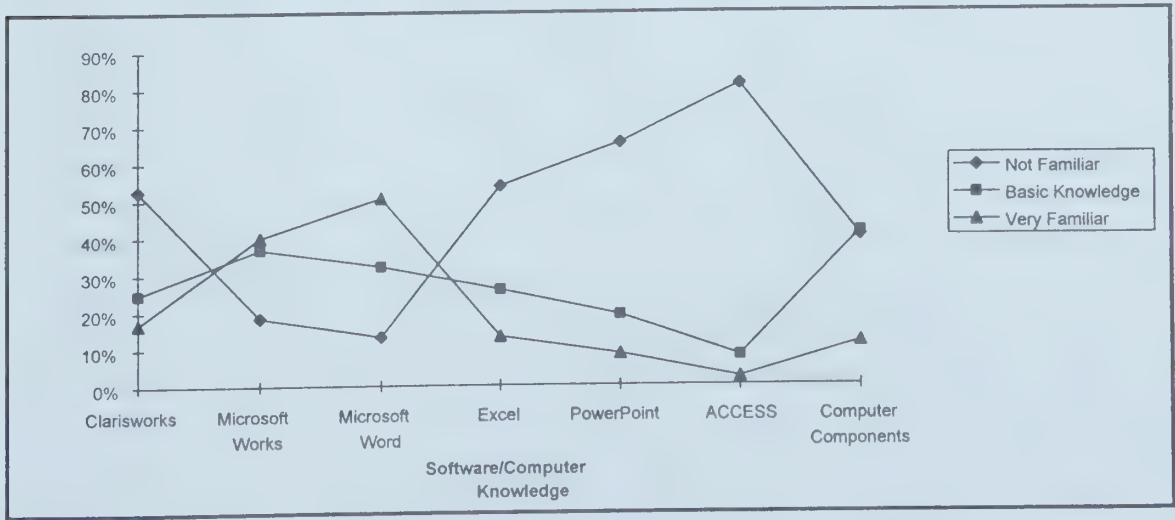


Figure 3. Student familiarity with computer components and specific software.

computers for their own purposes. Some used word-processors to print school lesson plans and handouts, some used computers to prepare a PowerPoint presentation and for recording attendance and marks, and a few did Web searches to prepare lessons. Few used available software for teaching purposes in the classroom.

The students interviewed noted that some of their reasons for not using the technology more often with their classes during field experiences were: the school's failure to have malfunctioning computers repaired; their cooperating teachers' lack of knowledge about what to do with computers; computers in a lab setting rather than in the classroom, a situation which was found not to be conducive to whole-class instruction and individualized learning; and concern over the absence of censorship on the Internet. One person also commented on the lack of up-to-date educational CD-ROM programs available for them to borrow from the campus library collection as being a deterrent.

To enhance their preparation in using computer technology for their future teaching, the students interviewed suggested that the Faculty of Education should:

- assist preservice teachers in learning to use the Internet not only to prepare lessons, but also to teach children how to make use of it as a learning tool;
- expose preservice teachers to various software programs which they could use to help facilitate children's learning in curriculum areas;
- increase preservice teachers' knowledge of databases and e-mail integration in curriculum areas;
- teach preservice teachers how to integrate computers into all curricula, not just one or two lessons;
- put more emphasis in course work on computer applications in the classroom;
- encourage professors to model computer use in their education courses, for example, by allowing students to use e-mail or the Internet to contact them or to send assignments electronically.

Faculty Questionnaires

Faculty members were surveyed about the following: how they currently integrated technology into their undergraduate and graduate course; what new ways they would like to be able to include technology in their teaching; what currently facilitated and hampered their integration of technology into their courses; and what they would like to see the faculty do to assist them in their efforts.

Surveys were distributed to 120 faculty members and 27 responded. These respondents most commonly used computer technology for preparing lessons, including PowerPoint presentations and making overheads for lectures; as a management tool such as using spreadsheets for recording grades; and for banking test items. Computers were also being used in some classes as learning tools with students, for example: to explore CD-ROMs and web sites; for e-mail discussion groups; to do math using spreadsheets; to access the Internet as an assignment looking for course-relevant information; for collecting assignments, including collecting papers on disk that were merged for collective class sharing; and to increase avenues for student-instructor communication

through e-mail, conference calling, and by setting up a listserver to contact each other during class and while out on field experiences. Although some faculty members discussed and demonstrated how technology could be integrated into the curriculum, it was most often used as a personal productivity tool.

The faculty surveyed concurred that they would like to incorporate technology in their teaching in several ways. They would like to use technology to increase communication with other faculty and with students through e-mail, listservers, and web pages. They also wished to be able to help students use the Internet to find resources. Some faculty members wished to make more use of LCD panels or other projection devices.

Four factors were seen to be the greatest deterrents to increased faculty use of technology. One of the most often voiced concerns was the lack of money. More money was needed to purchase software, to replace outdated hardware, and to upgrade computer facilities in the Faculty. Money was also mentioned as necessary to hire support people to help both faculty as they attempted to increase their computer skills and students as they worked in computer labs.

A second concern noted often by the respondents was time. Time was needed to learn to use the technology and upgrade knowledge and skills, to develop materials, to keep abreast of the latest software, and for class set-up. Respondents wished to learn more and do more with technology but feared it would take time away from research.

A third common area of concern for faculty included issues of training and support. There were mixed reactions to the form of training that was viewed as being most effective. However, all the respondents agreed that being given the opportunity to learn to use the technology competently was essential before trying to integrate computers into their teaching. Workshops were not always the most convenient way of upgrading knowledge and skills. The consensus seemed to be a preference for more one-on-one assistance as the individual required it. Although faculty members appreciated the current level of support given by the technical experts, it was viewed as being too little. Faculty wished to work with technology experts who would provide a mentorship role. Not only would these technology assistants be useful for initial training, they would also address the issue of support for the instructors' ongoing upgrading of their computer knowledge and skills.

One final area of concern articulated by the respondents was convenience. Frustration was voiced about the inaccessibility of computer labs, portable equipment, and software for working with classes. The amount of effort required to bring technology into the classroom was seen as onerous. Also, the equipment was not always reliable because settings or software were modified from one user to another.

The deterrents identified above were voiced across campus. The Learning Support Systems' (1997) survey of the entire university academic staff indicated that the top three deterrents to using instructional technology were funding, time to learn new technologies, and classroom infrastructure. The survey showed that the most preferred method of training for faculty was short workshops to learn basic skills. Technical and infrastructure support was preferred at the faculty or department level. Other sources identify similar

barriers to integrating technology (Carr, Novak, & Berger, 1992; Wetzel, 1993; Willis, Willis, Austin, & Colon, 1995).

Discussion and Recommendations

Our survey of the faculty was based on the assumption that computer technology will play a significant role in education. Logan (1995) describes computer technology as "not just a new technology or a new medium of communication; rather, it is a radical new way to process and organize information and as such it represents a new form of language" (p. 6). We believe that computer technology literacy is important for all citizens and that our preservice teachers need to be prepared to help their own students develop this literacy. As well, we believe that computer technology is a tool that will help students learn the knowledge, skills, and attitudes described in subject area curricula. Our preservice teachers need to be exposed to the technology and the techniques that lead to cognitive development. It is these beliefs that should guide our development of technology integration into a preservice program and not just the demand for teachers with strong computer skills.

The survey provided us with additional information needed to develop a technology plan by giving us a picture of our students' computer abilities and their access to the technology. A major concern raised by the results of this survey is the level of familiarity the Faculty of Education students have with basic applications identified by the school districts and Alberta Education. Although students seem to have more skills than students entering the faculty 15 years ago and are spending a substantial amount of time using computers, the use is restricted mostly to personal productivity such as word-processing and library searches. However, Gregoire et al. (1996) report, "the benefit to students of using new technologies is greatly dependent, at least for the moment, on the technological skill of the teacher and the teacher's attitude to the presence of technology in teaching." These researchers also found that positive effects on learning were more noticeable if the teacher and his or her students were competent users of the technology. Because the technology outcomes for Alberta describe the use of tools such as the word-processor, spreadsheet, database, e-mail, Internet, graphics, and multimedia, we should expect preservice teachers to have high levels of competence in the use of these applications. The real challenge here is to help preservice teachers become more comfortable with these applications and to use them in student-centered teaching strategies.

As mentioned above, our Faculty already has a basic skills course, but more effort will be required to help preservice teachers learn to integrate the technology effectively in their classroom (Flake & Molina, 1995). One course in an undergraduate program will not raise preservice teachers' competences to the level needed, nor can it address how the technology can be implemented across the curriculum. Several courses seem to be required, yet it is difficult to find more room in the teacher education program for courses that specifically focus on integration. Instead, we may have to rely on developing assignments in many of our courses that require preservice teachers to use the technology to do the very things they will require from their students, that is, problem-solving, decision-making and inquiry (Wiburg, 1991). Courses in curriculum and instruction should have assignments that require preservice teachers to develop

curriculum activities involving the use of a computer. The introductory computer course that all preservice teachers take should probably require prerequisite or corequisite skills that must be completed outside of the teacher education program so that more sophisticated skills can be developed. Teacher education students could be provided with a list of resources that would help them acquire basic technology skills. Many of these resources are self-paced modules of instruction that exist online or in hard-copy format.

The survey results suggest other possible directions for enhancing technology integration in the Faculty of Education at the University of Alberta. Ensuring easy access to the technology is one of the first steps to improving technological skills for both students and faculty (Thompson, Schmidt, & Hadjiyamni, 1995). Providing regular access to a computer is one way of increasing students' computer expertise. The problem, however, is the cost involved with providing that access. Ideally each student would own a computer, but with the increasing cost of higher education such a requirement would be considered by many as making education inaccessible to lower-income individuals. Some universities do require ownership of a computer, but such a requirement has been questioned by both students and faculty. After reconsidering its value to students, some universities have removed their mandatory computer ownership requirement (DeLoughry, 1995). Their experience was that faculty members were not ready for technology integration, and costs to the universities were not reduced because money still had to be invested in campus facilities and in providing more support services. Sonoma State University, on the other hand, took a different approach, requiring that all first-year students have 24-hour access to a computer (DeLoughry, 1995). Low-income students can borrow computers at no cost and others can buy or rent a computer.

Requiring students own a computer raises questions about equity, but ignoring the computer accessibility issue also raises concerns about equity. Students who cannot afford a computer will probably not acquire the same skills as students who own a computer, and they can be at a disadvantage when seeking teaching positions. Our faculty will have to consider how it will ensure all preservice teachers have equal access to computer technology.

Although this initial discussion has focused on the needs of preservice teachers, it seems obvious that the first step toward technology integration is to address the barriers our faculty claim prevent them from implementing technology into their classes. Faculty members cannot help preservice teachers until they have helped themselves. A commitment to increase funding in the technology area will help to alleviate many of the concerns. Some academic staff still need a computer in their office; others need upgrading. Easy access to current, appropriate software is also essential. As well, equipment to display material from a computer should be readily available. This is an obvious solution and will become viable only if government funding is specifically allocated to support the infrastructure needed to integrate technology.

Increased funding, however, will not help professors find more time. They will need time to attend workshops, develop new assignments, and restructure courses. We will need incentives to convince staff members that they need to take on one more commitment. Incentive programs such as offering a faculty

member a new computer if he or she attends a summer technology institute could be used to encourage this commitment.

Providing instruction and support on a need-to-know basis would benefit faculty and students, but this requires having a large pool of knowledgeable individuals on call. One suggestion might be to have knowledgeable students work at a help desk to answer questions and troubleshoot hardware and software problems. This role would benefit these students because they would build technical expertise as they find solutions for the problems raised. However, this would help address only the technical problems. We also need to identify individuals (faculty members, graduate students, or inservice teachers) who would help faculty develop and organize projects that integrate technology into their curriculum and keep the faculty informed about useful new technologies and software.

Conclusion

This report identifies the possibilities and problems currently being experienced by our education students and faculty in terms of acquiring technological skills. Some solutions are offered to help both groups meet the expectations set forth by Alberta Education. Although this needs assessment did not come up with anything surprising, it has given us the information we need to restructure our program, to reallocate our resources better, and to direct our course development initiatives.

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Research Notes: Guidelines

The *Note* should report briefly on the author's/authors' research-in-progress or recently completed research and should feature work that has not been reported elsewhere in journal publications. This current work should be situated, briefly, in the context of other pertinent scholarship, including the author's or authors' related research. The focus of the *Note* could be either a specific study or inquiry or an overview of an ongoing line of inquiry where fuller reporting of results will not occur in print for some time. The maximum length for a *Note* is 1,000 words (about 4 double-spaced pages in standard 12-point type), excluding references and one or two tables or graphs. To encourage communication between researchers, authors of *Research Notes* are asked to provide contact information such as e-mail, fax, and/or telephone numbers for publication with each *Note*. No abstract is required, but in all other respects the usual **ajer** guidelines for manuscripts should be observed.

Submissions to *Research Notes* will be reviewed for readability, clarity, organization, length, and adherence to all *Alberta Journal of Educational Research* (**ajer**) guidelines. Any submission that is judged to meet these criteria will be published as soon as possible to minimize the usual delays in moving submissions to publication. Any submission that is judged to require revisions according to the criteria outlined will not be published, as the *Notes* must have some currency if they are to serve the purposes identified.

Andrea Mueller
Queen's University

Creating "Spaces of Inquiry": Participation in Elementary School Science

A year-long study was conducted in a grade 6/7 elementary class in order to explore and document the nature of children's participation in elementary school science. Teacher and researcher collaborated to plan and teach science with a focus on creating opportunities for children to participate. Children embarked on three extensive science projects with their teacher working in teams of four or five and learning as a community of inquiry. Audiotaped records of children's and teacher's comments, children's creations, and extensive field notes provide a foundation for constructing an interpretive narrative of that one year of school science.

Science in school often emphasizes what is known, or the facts (Bentley & Watts, 1992; Newton, 1988; Wassermann & Ivany, 1996). That is, science curriculum guides generally emphasize expected learning outcomes, rather than emphasizing participation and inquiry in the spirit of science. Wassermann and Ivany (1996) argue that "to know science is not merely to learn the words, the names of science" (p. 5). Their idea of "sciencing" promotes participation and describes a generative process and approach to elementary science education. If elementary science education focuses on sciencing, then inquiry, exploration, and adventure will feature more prominently.

At the same time, participation is identified as an important aspect of school science. "The provincial science curriculum (BC Ministry of Education, 1995) promotes an activity-based program where students learn scientific knowledge in a hands-on and 'minds-on'" way (p. 2). However, no guidelines or suggestions are provided for teachers about the nature of an activity-based program or the meaning of *hands-on* and *minds-on science*. Consequently, participation in school science is interpreted and enacted in diverse ways. How, then, do teachers create contexts for students to participate in school science?

This research project identifies three distinct "spaces of inquiry" in and across extended science projects. These spaces provide diverse opportunities for children to participate and provide a model for teachers about how to create contexts for participation in school science. Spaces of inquiry are not fixed by location, but rather are characterized by social interactions and purpose of inquiry. There is inquiry at the group level, inquiry at the class level, and inquiry at a larger community level. Overall, opportunities to participate in different spaces of inquiry contribute to diverse learning opportunities for students. What were these three spaces, and do we need multiple spaces in education?

First, generative spaces provide small groups of students with opportunities to learn collaboratively. It is a creative, dynamic, open-ended space of possibilities. Students express tentative ideas, listen to each other, discuss problems, negotiate, and make decisions in this space. This space reverberates with various students' ideas as they work together brainstorming and recording their ideas. The expectation from the teacher's perspective are that students are responsible for organizing their time and coming to consensus in this space. Moreover, students need to be prepared to communicate their ideas to other teams as well as listen to other teams and engage in conversations about proposed ideas. Students spend most of their project time working in a generative space, so it is essential for them to learn to collaborate as a team. These collaborative efforts require students to develop specific social skills to succeed (Linn & Burbules, 1993). Students made the following comments: "it's hard to cooperate in a group" and "sometimes you have to make a compromise in a group" and "I really enjoyed working in a group because you learn things from each other and solve problems together." It is a space of responsibility and an opportunity to take ownership for their learning.

Second, rehearsal spaces provide each small group of students with several opportunities to present their ideas to the class as they attempt to push the boundaries of what they know and in the process expand each others' ideas. In this space, listening, reflecting, reframing, inquiring, and responding are critical. Interactions are predominantly from student to student as they seek to describe and clarify their ideas. From a teacher's perspective the expectation of this space is for students to present their ideas in the format of their choosing to the larger class community and to allow others to make comments and contributions. This space also allows the teacher the opportunity to check on the progress of groups and to listen to the issues that the whole community of students raise. It is an open space of collective inquiry. One girl describes it this way: "we can share ideas and some people have really good ideas." And another girl observes, "I learned how to be more confident about presenting something." Overall, this space encourages students to rehearse their ideas in a supportive collaborative environment.

Third, performative spaces provide opportunities for students to interact with an audience. It is simultaneously a performative and transformative space. This is a unique opportunity for students to transform their roles and registers as they present their finished creations to their community. In this performative space students co-create with their audience and reperform what they know, or have learned, each time they interact. Put another way, each time students interact with an audience member they have a new opportunity to respond and express their ideas. Students made the following comments: "I enjoyed presenting to others" and "I learned how to present and explain the process of our engine so that others would understand it." For many students this performative space made the projects real and worthwhile.

Initial data analysis reveals the importance of contexts for participation in elementary school science. In particular, the researcher identifies spaces of inquiry that afforded students diverse opportunities to participate with science content in a community of inquiry. These spaces of inquiry seem important

because they provide an alternative way to think about learning and teaching science, they provide opportunities for designing collaborative group work, and they challenge educators to consider children's contributions to their science learning. Further investigation is required to explore the potential of multiple learning spaces across the elementary curriculum.

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Educators' Use of Metaphors to Deal with Anger in the Schools

Anger, which can lead to violence, has become an increasingly serious problem in today's schools. As children and youth carry more stress, anger, and conflict into the classrooms and onto the playing fields, educators experience increasing levels of stress, tension, helplessness, and frustration. One approach to deal with the increase in student anger and aggression that has been adopted by many school districts is offering students programs in anger management. However, most anger management strategies are largely cognitive, even though intense anger reactions often occur before we have time to consider consequences. As well, this approach places the onus almost entirely on the students to make changes in their behaviors.

Although I agree that teaching children how to control, rather than be controlled by, their emotions is an extremely important aspect of their growth and development, I believe that this is the second step in the process of supporting behavior change. First we must look to ourselves to make whatever changes possible to affect the situation. In keeping with this belief, I created a small, descriptive study as a preliminary approach to determining if a new approach to managing anger in the schools using the exploration of educators' metaphorical images of anger might be successful.

Connelly and Clandinin (1988) argued that metaphorical images illuminate the connection between teachers' past experiences and their present action. Metaphors can provide clues about how teachers construct their worlds (Bullough & Stokes, 1994; Collins-Eaglin, 1994; Munby & Russell, 1990) and allow teachers to see how their students' behaviors are congruent with the world they as teachers have constructed. Consequently, metaphor enables teachers to move beyond their current understanding by providing a view of the situation that highlights aspects previously less salient. As new dimensions of a situation become evident, new understandings and approaches for resolution arise (Munby, 1986; Schön, 1979; Stanton, 1992).

This study sought to explore the significance of metaphor in teachers' experience of students' anger and anger management. Through the use of a critical incident, eight female elementary schoolteachers and counselors discovered and examined metaphorical images that embodied the thoughts, feelings, attitudes, and behaviors associated with their experiences with angry students. Three personal interviews with each participant examined whether the metaphorical images were: congruent with the educators' desired approach to classroom management; effective in dealing with angry students; difficult to implement at times of intense emotion; and effective in altering the feelings, attitudes, or behaviors of participants and their students.

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Research Findings

One grade 7 teacher imagined her adolescents as marionettes. Their strings were constantly being pulled by parents, teachers, peers, society, and hormones, causing them to be awkward, confused, and often on edge. By uncovering this metaphorical image, the teacher now viewed her students' anger as a part of their normal development and, therefore, did not need to take it personally. She described her new experience of her students' expression of anger as more accepting and found they soon began to "back off faster." Other metaphors of angry students uncovered by the research participants included a pool ball, leaf, brush fire, windmill, and the Tasmanian Devil.

In general, the experience described by the participants in this research suggests that metaphors:

1. provide an avenue for self-reflection; educators become aware of the incongruities that exist between their stated beliefs and their actions. They identify their own roles in the dynamics that exist between themselves and students;
2. provide a means for emotionally detaching from their students' anger, allowing for other choices to be made and a reduction in teacher stress;
3. are more accessible than other strategies at times when the body is flooded by emotion and complex cognitive operations are not possible (Goleman, 1995);
4. have moderating effects on the inappropriate and aggressive behaviors of students by providing a change in educators' conceptions of anger and their attitudes and actions toward angry outbursts;
5. are automatically personalized to fit the uniqueness of the individual. Each person's metaphor is different in some way and may be used in the manner that is most congruous with his or her personality and needs.

Limitations and Future Research

A small descriptive study of eight participants, all women, from only two schools does not allow the results to be widely generalized to other situations. The sample size should be significantly increased as well as including a greater variety of participants. Questionnaires or a more structured interview might be used to focus the research on the issue of effectiveness of the process for managing anger. Rather than relying solely on educators' experiences of their own and their students' behaviors, observations might be incorporated to add an objective view of behaviors before and after engaging in the process of metaphorical exploration. A rating scale might also be administered to both educators and students. Perceptions of calm versus tension in the classroom could be measured in this way.

It would also be important to study the effectiveness of the process when introduced to a group of educators rather than working with one individual at a time. Obviously the latter approach would be extremely inefficient and largely impractical. Groups of various sizes and concentrations (of teachers and/or counselors and/or administrators) may be tried to decide what conditions are optimum. It might also prove useful to have a series of follow-up interviews to determine the lasting benefits of using metaphors as a means of anger management.

Just as some researchers have recently questioned the specific reasons for the success of cognitive-behavioral strategies (Cormier & Cormier, 1991), one needs to question the reason for success of this process. Was it metaphors per se that led to the changes in attitudes and behaviors of the participants and their students? Might it simply have been the willingness on the part of these educators to be self-reflective: to evaluate their own behaviors and beliefs? Would the same results have occurred through a simple discussion of circumstances and an exploration of alternative approaches to dealing with the students?

Although there are limitations to this exploratory study, the findings provide an exciting possibility for a whole new approach to the critical issue of anger management in the schools.

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Effects of Peer Mediation Training in Junior High School on Mediators' Conflict Resolution Attitudes and Abilities in High School

Earlier research has shown that student peer mediation can be an effective form of dispute resolution (Johnson et al., 1996) and that such training can enhance mediators' own attitudes, beliefs, and experiences related to conflict (Johnson, Johnson, Dudley, & Magnuson, 1995). The present study used an existing groups design to determine whether the experience of peer mediation training in junior high confers benefits on conflict resolution attitudes and behaviors that endure into high school. It was hypothesized that students who had previously been trained as peer mediators, relative to those never trained in peer mediation, would be more likely to endorse a variety of positive attitudes and beliefs about conflict resolution and to be more satisfied with their own abilities to resolve conflict with peers and teachers.

Method

A survey of students' perceptions, experiences, and beliefs about conflict was administered to 319 high school students (205 male, 106 female, 8 gender unreported) in grades 10 to 12 attending an urban high school in Winnipeg, Manitoba. Fifty-one of the respondents indicated that they had been previously trained as a peer mediator in junior high school. This group of former peer mediators included more girls than boys, $\chi^2(1, N=296) = 7.11, p < .01$.

Results and Discussion

To our surprise we found that peer mediators did not significantly differ from non-peer mediators in several areas where differences were expected. Relative to peer mediators, non-peer mediators reported a similar level of satisfaction in their own ability to resolve conflict with other students and teachers. The two groups also reported similar levels of belief concerning (a) the value of communication in solving conflict, (b) optimism that conflicts can have positive outcomes, (c) the value of avoiding conflict, (d) the degree to which conflict interferes with learning, and (e) dislike of conflict situations. Finally, the two

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groups were also similar in their global perceptions of conflict as being (a) intrinsically manageable, (b) necessarily violent, or (c) always best avoided.

A possible explanation for the absence of any enduring differences in conflict-related attitudes and behaviors between those students who have previously received training in peer mediation and those who have not is suggested by an examination of the content of the peer mediation training itself. The peer mediation training the students received in junior high focused primarily on teaching mediation skills (e.g., setting rules, listening, devising an agreement). This training produced highly effective peer mediators, as evidenced by a satisfaction rate of over 90% reported by 155 users of the service. However, this training program did not target mediators' own attitudes and conflict resolution skills directly. This contrasts with the approach to peer mediation training taken by Johnson et al. (1996) in which extensive training in using negotiation to resolve conflict is included and where beneficial effects of mediation training on mediators' own attitudes and conflict resolution skills have been obtained at short-term follow-up. It would appear, therefore, that if the peer mediators in our research did undergo any immediate attitude changes or enhancements of their own conflict resolution skills because of their becoming trained peer mediators, these changes were not sufficiently durable to be evident one or more years later in high school. Accordingly, if educators wish to ensure that positive changes in peer mediators' conflict-relevant attitudes and behaviors persist over time, it is likely that explicit interventions aimed at these attitudinal and behavioral targets will be necessary.

Conflict Resolution Research Program

The present study was undertaken in the context of the authors' ongoing program of research aimed at developing basic and applied knowledge of how adolescents view and manage conflict both in school and the community. A unique aspect of this work is the partnership that has been forged between team members working in the public school domain and at a research-oriented university. This has been a positive collaborative process involving complementary contributions from different individuals. Based on our experience, we believe this kind of arrangement between public school teachers and university faculty can be mutually beneficial.

In our work we have found preliminary evidence to indicate that students' beliefs about conflict are strongly related to how they have seen conflict resolved around them, and to their own ways of resolving conflict (Johnson, Thomas, & Krochak, 1997). At present we are developing a screening tool to identify those whose negative beliefs about conflict and conflict resolution may put them at risk for violent or otherwise destructive or ineffective ways of managing conflict. It is our hope that the availability of a reliable and valid measure of problematic attitudes and beliefs concerning conflict and conflict resolution will facilitate the identification of those who may benefit most from interventions to enhance their conflict resolution skills.

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Influence of Task Difficulty and Background Music on Working Memory Activity: Developmental Considerations

Introduction

Higgins and Turnure (1984) studied the developmental changes in children's focus of attention during aural distraction. They used a visual discrimination task at two levels of difficulty. During each task children's songs were played at varied amplitudes. With music, 12-year-olds showed improved discrimination, 8-year-olds were unaffected, and 5-year-olds showed decreased performance. Neither task difficulty nor gender were related to the results.

Although Higgins and Turnure (1984) constructed tasks where difficulty levels were adjusted to each age group, in practice the tasks assigned to the youngest group were more difficult than those assigned to the older groups for two reasons: (a) the music played was a more meaningful distracter for the youngest group than for the others, and (b) their study was conducted in laboratory conditions with separation between the participants and the tester, a situation more likely to create anxiety in younger children, increasing the difficulty of their tasks.

By maintaining identical task difficulty across all age groups, our study sought to investigate more precisely the hypothesis that there are developmental stages in the ability to allocate energy in working memory in the presence of background music.

Research Design

The 300 participants were 100 kindergaren children (mean age 5.6), 100 grade 2 students (mean age 7.8), and 100 grade 6 students (mean age 11.4). Each age group was divided at random into two experimental conditions: performance with or without background music. Tasks at three levels of difficulty were assigned in each experimental condition.

There were two types of tasks: visual discrimination, which requires the subject to hold previous stimuli and responses in working memory while solving a new problem, and square identification, in which model squares are visible throughout the task. Earlier research determined each age group's musical preferences, which were then recorded in random order. The children were tested individually in comfortable and familiar conditions.

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Results

Visual discrimination task. A three-way analysis of variance (3 age groups x 3 levels of task difficulty x presence versus absence of background music), where the number of correct responses was the dependent variable, showed two significant main effects: age ($F_{2,298} = 19.7; p < 0.0001$) and task difficulty ($F_{2,298} = 11.35; p < 0.001$). In general, age improved performance and task difficulty impaired it. Duncan analysis (see Figure 1) showed that background music improved performance at the youngest and middle ages ($p < .05$) and had no effect on the oldest participants ($p > .05$).

Square identification task. A three-way analysis of variance (3 age groups x 2 levels of task difficulty x presence versus absence of background music) where the total number of correct responses was the dependent variable showed two significant main effects: age ($F_{2,298} = 16.3; p < 0.0001$) and task difficulty ($F_{2,298} = 13.80; p < 0.001$). Older children performed better, and task difficulty impaired performance. The analysis showed one interaction: background music x task difficulty ($F_{2,298} = 4.17; p < 0.01$, see Figure 2). Duncan analysis showed that in the easy and difficult tasks background music had no influence ($p > .05$). However, in the medium-difficulty task, background music lowered performance significantly ($p < .001$).

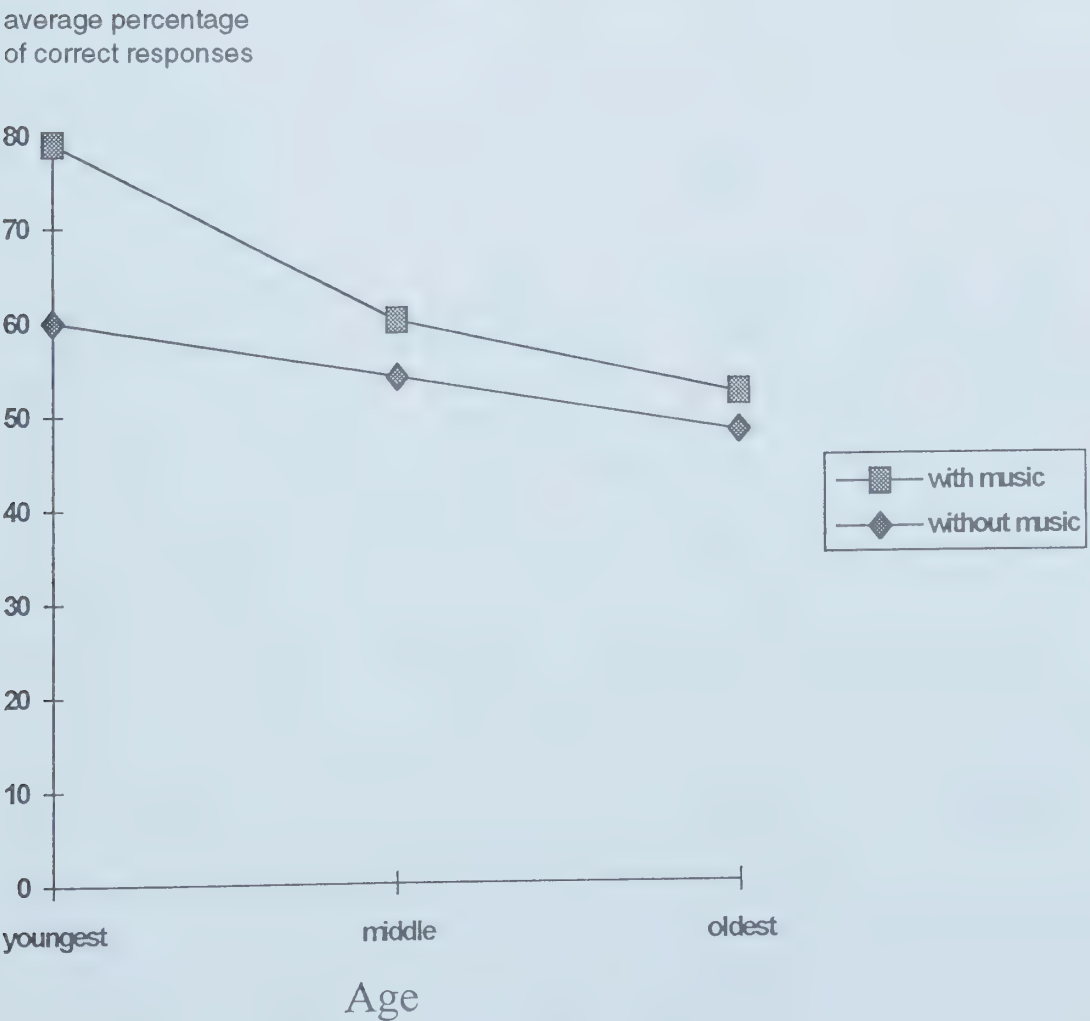


Figure 1.

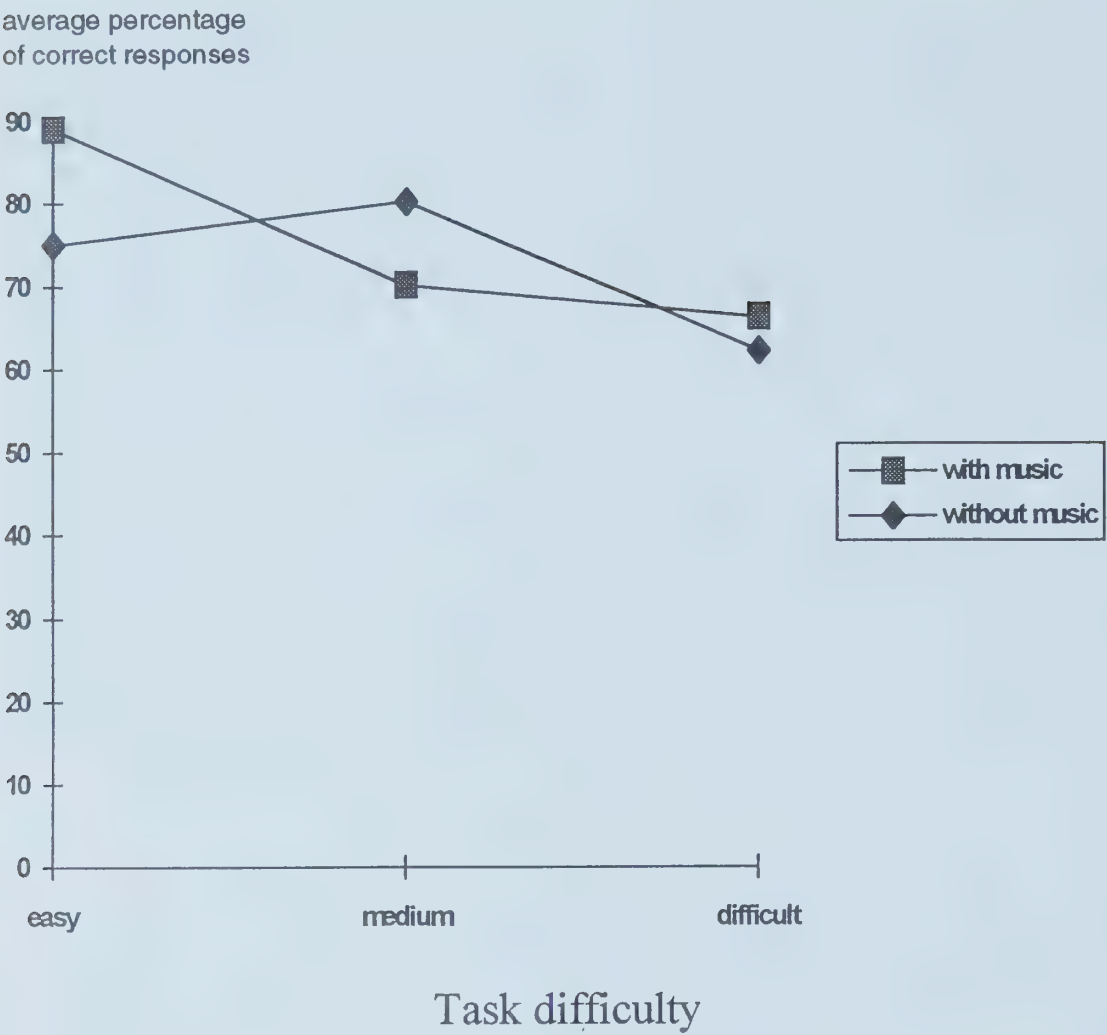


Figure 2.

Discussion

Our findings suggest that in the visual discrimination tasks background music improved performance in the low- and medium-difficulty tasks and did not affect performance in the high-difficulty tasks. In contrast, the results show that in the low- and high-difficulty square identification tasks background music did not influence performance, whereas in the medium-difficulty task background music lowered performance.

The differences between these two tasks can be explained by the greater difficulty of the discrimination task. Throughout the square identification task the model squares are visible. Automatic performance is quickly achieved, lightening the load of working memory and facilitating fast and effective performance (Fisk & Schneider, 1984; Hasher & Zacks, 1979; Schneider & Fisk, 1982; Schneider & Shiffrin, 1976, 1977; Sternberg, 1986; Zacks, Hasher, & Sanft, 1982). In contrast, the visual discrimination task requires the subject to hold previous stimuli and responses in working memory and add information after the presentation of every card. Hypotheses must be formed, remembered, and examined repeatedly. In addition, the subject must apply processes of decision making (Kaniel, 1995; Presseisen, 1987) to the data through error and generalization of stimuli to concepts of shape, color, and orientation. Thus the discrimination task produces a load in working memory and requires continuous investment of energy (Baddeley, 1981; Hasher & Zacks, 1979.)

The relationship between distracters and performance is best appreciated in the context of *meta-attention*, a term referring to the ability to think about attention to awareness ("inner eye") of one's attention processes, and to one's complete and accurate knowledge of these processes and ability to manage (Forrest-Pressley, Mackinnon, & Waller, 1985; Weinart & Kluwe, 1987), monitor, and control them (Nelson, 1994). The conceptual key to understanding meta-attention is *task load*, a term that combines subjective and objective aspects of task difficulty. *Objective difficulty* refers to parameters such as time limits, loud background noise, and factors that make multiplication harder than addition and philosophical essays more difficult reading than fairy tales. *Subjective difficulty* subsumes learners' personal components such as basic needs (hunger, thirst, relief of pain, etc.), perceptions of time pressure, hyper- or hypo-arousal, anxiety resulting from previous failures at a task, degree of task familiarity, degree of automaticity, and others (Kaniel & Arzi, in press). The interaction between objective and subjective difficulty creates the task load experienced by a specific learner at a given moment. When the processing load is high (task is difficult for the learner), it is hard to activate meta-attention.

Background music can increase arousal. The greater a task's ease and monotony, the more "loaded" the music should be (e.g., unfamiliar music and/or interesting lyrics). Similarly, if a task is difficult, musical distraction should be reduced. At a certain point, task load becomes so great that *any* background noise is disruptive.

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